

Stunt News

Precision Aerobatics Model
Pilot's Association

January/February 2009 \$5.00



BRAZILIAN STUNT ADVENTURE





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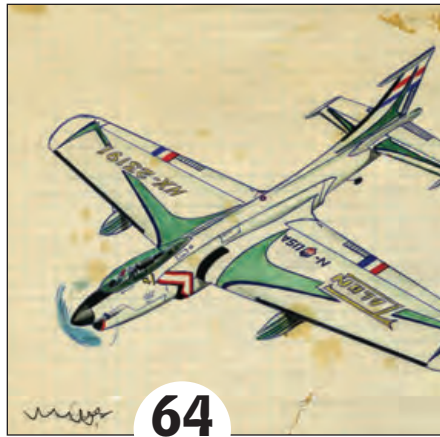
Brad Smith flies his Ultimate biplane in the Intermediate Profile Stunt event at last year's Brodak Fly-In.

On the cover: David Fitzgerald, Howard Rush and Windy Urtnowski were invited by Thomas Case to attend a contest in Saõ Paulo, Brazil. Windy has prepared a report on the happening for us. Our cover this month is dedicated to their excellent adventure! Photos by Windy Urtnowski and David Fitzgerald.

PAMPA, an AMA approved Special Interest Group, founded July 1973. Objectives include a means of communications among control line stunt fliers, voting on issues affecting control line stunt, and administration of the Control Line Precision Aerobatics Event at the Nats.

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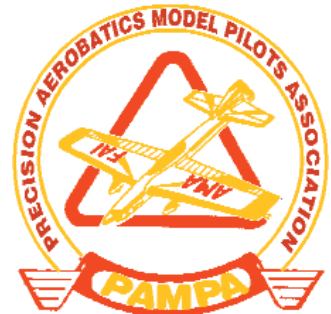
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President's Column

By Bill Rich

I would like to take this opportunity to look back at the year we have just completed and highlight some successes as well as challenges still ahead.

I am pleased to report that our fiscal condition has improved. We (when I use the term we, I am referring to PAMPA) managed to come in

on budget in regards to our '08 expenses and are starting '09 in a positive position. Major changes were made in the production and distribution of SN which enabled us to meet our expense objectives. There are a number of options available to increase revenue moving forward. We will be pursuing many of them and will keep you updated on our progress. Our goal is not to make PAMPA an income producing entity, rather to insure that we have adequate funds for our responsibilities, finish on budget, and have some carry-over for the next fiscal year.

I am very encouraged by the gains we have made in our membership roles. Past members who had been alienated by our past difficulties are now starting to return. Our SN Editor's first column regarding the "Elephant in the room" prompted a discussion from former members that has resulted in positive initiatives. One initiative, which I believe will be implemented with the next issue, is the exchange of ads between Control Line World and SN. I cannot overstate the importance of this initiative. This is a win-win for the entire Stunt community. This is a major step in the right direction.

I have received a number of personal correspondences noting the "change in environment" and the desire to return to PAMPA. This is personally pleasing to me, as I am determined to heal our past wounds and increase the positive aspects of being a PAMPA member. This can only happen by continuing to focus on issues that have caused dissension in the past, open dialogue, and steps forward to improve PAMPA for members as well as potential members.

We need to do a much better job of publicizing our "on-line" membership. I believe this will bring in a large number of "rest of the world" fliers to PAMPA. This option should be extremely attractive and very cost effective for these potential members. We will also continue the CD option; feedback indicates those that are receiving the CD are very pleased and do not want to see this option discontinued. I understand why many want the hard copy SN. However, if you have never viewed SN on-line, or via CD, you have missed the impact of the all color version.

I have been extremely pleased with the performance of our new SN Editor and Layout Technician. Bob and Liz are continuing to bring excellence and professionalism to our SN. We are still playing "catch-up" in terms of getting SN out on schedule. Bob's aim is to be back on schedule by the March/April '09 issue. The key to returning to an on-time schedule is the submission of material by all PAMPA members. Bob and Liz cannot work their "magic" until they have the articles needed to produce the issue of SN. We are currently looking at different printing options to improve the quality of our printed version of SN. Bob and I have discussed his plans

for adding columns, advertisers, and content to SN. I am sure you will be pleased with his efforts as the year progresses.

Standing PAMPA committees are in the process of being reviewed and evaluated. Some will need to be eliminated while others will undergo a change in committee personnel. There has been a major change in the AMA Control Line Aerobatics Contest Board. Gary McClellan has resigned as Contest Board Chairman; it is my understanding that he will remain as District VIII Contest Board Member. Gary cites personal reasons that have limited the time he can devote to the Contest Board. Gary has been the Chairman and District VIII Board Member since the inception of the current Contest Board concept.

Gary recommended, and the AMA approved, Keith Trostle as the new CLCB Chairman. Gary and Keith have worked closely together on all of the recent contest rules proposals. Keith will make an outstanding CLCB Chairman, and our congratulations and thanks go out to Keith for taking on this position.

Some of the challenges and issues facing the EC for 2009 are as follows:

- Increasing the Judging Corp
- Finding replacements for volunteers that have done "more than their share."
- Representation of International Members
- Distribution of SN
- Partnering with the AMA
- Additions to the PAMPA Website

Without competent, trained, motivated judges our event cannot move forward. I would encourage each of you to consider judging during the upcoming year. I have started judging at our local contest and have found it very rewarding. Sometimes it can also be very entertaining. I am in the process of appointing a committee to look at ways to address the issue of judging.

Another issue that is on-going is Appearance Points. Frank McMillan is chairing this committee and he has issued a first draft proposal to the committee. This is a very difficult assignment; one possible solution to the issue may lie in the training of Appearance Point Judges at the Nationals. This could be done on site prior to the actual Appearance Point judging.

We need to move forward on the issue of representation on the EC for our International Members. It's time for us to recognize our International Members and their lack of representation in PAMPA. Brett Buck is looking at this and hopefully we can move forward on this issue.

We have made progress in finding replacements for volunteers that have done "more than their share," but this continues to be a work in progress. However, we are still looking for a "Few Good Men/Women."

Bob Kruger continues to make a significant contribution to PAMPA via the website. There are a number of issues he is currently working on. The website will continue to improve and we will enhance its usefulness to our members. Our goal is to make this the premier CL site on the internet.

In closing I would like to wish all of you a great new year, filled with success in all of your endeavors. This will be a great year for PAMPA and CL. Make sure you enjoy your hobby.

See you at the field. SN

Starting Points

A note from Bill Zimmer: Bill Zimmer has been spending some horizontal time of late recovering from open heart surgery. He has received dozens of calls and letters during this recovery process, and Bill wanted to thank all those who were thinking of him. Here's what he sent for us to put in *SN* ...

"To those that have been what I call my second family for the past 35 years that I have been a PAMPA member, a hardy Thank You for the emails, cards, phone calls and personal visits during my hospital stay after open heart surgery. It is greatly appreciated.

"Once again, thank you; may God Bless you all.

"Gratefully Yours—ZIM (Bill Zimmer)" *SN*

Woodland Davis Aeromodelers need help! The following was received from David Fitzgerald along with a request to print it in *SN* — Ed.

Doug Barton is largely responsible for the success of the Woodland Davis Aeromodelers, CL side. They thought they were going to lose their flying field at the end of 2008. However, now it looks like they will now have it through this year.

The reason for the extension and my letter is that they are in the process of buying a new site close by. Escrow is in January, and their major contributor has not been able to fund the cost of the property. This site has the potential to equal the Nats site. Since the AMA has reneged on the once promised West Coast flying site, this is a huge deal. The

Doug has asked me to help get the word out to the community to help with this project, hence this letter, and my posting this on the Stuka Stunt forum. They desperately need donations. Doug's letter to me follows. —David Fitzgerald

"Good afternoon David:

"I just wanted to give you an update on the progress of securing a new flying site for the Woodland-Davis Aeromodelers, Inc club. To start off, we have been working for four years on a new site. Most of that time has been [spent working] with the City of Davis, on the Howatt Ranch Project, east of Davis along I-80. After many meetings and negotiations and [an] approval on that site, the City of Davis last summer decided not to let us use the Howatt Ranch site.

"We have also looked at numerous other sites in the Yolo and Solano County area. Our number one site was a 320 acre parcel that sat west of the Yolo County Landfill and had been used by the Hunt Wesson cannery as a spray field for tomato effluent. The City of Davis needs a site for a police and fire training facility, and they took the lead in the purchase of 60 acres on the Hunt Wesson property, of which 40 acres is being sold to WDA. The City will keep the other 20 acres that will be located to the south of us. The balance of the property—about 260 acres—will be bought by the County of Yolo, to mine dirt for the landfill. This has been the most up and down project we have ever been involved with. Just when we think it all will go through, something comes up and either stops the project or slows it down. Such is life I guess, when you are dealing with government agencies.

have provisions for an RC site, five full size CL circles and a smaller circle for up to class A, for the kids. There is also room for two tether car circles and space available for an RC car track. We will have deeded overfly and retrieval rights to the balance of the 320 acres along easements for access and utilities.

"The WDA club is in the process of putting together a major fund raising program, to both acquire this site, and to develop the site. We have one shot at making this happen, or we will lose the chance to have one of the finest permanent sites in the Western US. The City of Davis has really pushed this along and has done a lot of the leg work to make this project happen, and we are very grateful for their efforts. If you could put out the word to the PAMPA and its members that if they could help make this happen, it would greatly be appreciated. It looks like escrow will close around the middle to the end of January, so we are working on a very close timeline. If you have any questions, please respond by email, or give me a call at (530) 662-6469.

"WDA is working out the details with the city of Woodland, to extend our present lease for another 12 months. That will go before the city council in January. Unless things change we are going to schedule and run our regular contest schedule in 2009. WDA is a 501(c)(3) Corp., and donations are tax deductible."

Anyone who would like to make a donation should indicate it is for the purchase of the property, or for the improvement of a particular project, i.e. RC, CL, etc. The contact person is Lou Fox, Treasurer, Woodland-Davis Aeromodelers, Inc., P.O. Box 74232, Davis, CA 95617. —Regards, Doug

David Fitzgerald also sent along the following note on this subject. —Ed.

I realize that the next *SN* (January/February —Ed.) will miss the funding for escrow deadline, but this is a long term project, and I'm sure they will accept any kind of donations, at any time. Please feel free to pass this along to any whom might be interested or may be able to help. *SN*

DavidLFitzgerald@sbcglobal.net
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C: 707-332-9564

We have one shot at making this happen, or we will lose the chance to have one of the finest permanent sites in the Western US.

site has the potential to easily host the TT, or a West Coast Nats once the facilities are complete—which will take a while. This will host several modeling disciplines, CL, RC, tether cars, etc.

"Anyway the long and short of it is that we have the property in escrow, with the City of Davis. The WDA club is putting up \$50,000 down and the balance is \$140,000. The new field will

Level Laps

By Bob Hunt

I'm going to kick this off with a big "thank you" to all the PAMPA members who have sent in feature article materials. Far and away feature articles are the most difficult things to come by in my position. The regular columnists do a great job of covering their particular interest area in each issue, and the District Directors also contribute in a big way by getting their reports in on time. But without features this would be just a newsletter, not a true CL Stunt magazine.

The most sought after features are How-To articles. It seems that everyone likes to learn new techniques and methods of designing, building, finishing and flying. If you have a new way of doing an old job in modeling, or a brand new concept, why not consider sharing it with the rest of us?

How-To articles work best when accompanied by a lot of sequential photos and a lot of caption information. It is important, after you've finished writing, to read your How-To text from the perspective of someone who might be reading it for the first time, and who might be a less accomplished builder than you are. You need to ensure that each step in a How-To procedure is explained fully and sequentially. Remember, this is our magazine and we don't necessarily have to worry too much about how much space a good, well written article consumes.

I like to publish all the news that's fit to print, not just all the news that fits! If an article is well written, explains something in detail and conveys useful information, then I'll schedule it for as many pages as is required to present it properly. If it gets too long, I'll split it in two parts (... or three or four) and run it in consecutive *SN* issues until it's complete. We have an opportunity here to use this newsletter/magazine to really teach those who want to learn; let's make sure we do it as well as possible! If your How-To article is a long one, that's fine; we'll put it to good use!

I am a big Stunt history buff and I really like reading about how our event evolved to where it is today and about those who did the pioneering along the way. Oft times these history pieces can be quite humorous and even a bit personal. Again, this is our publication and we can use it to capture these great stories, offbeat

humor and all.

I've received a really great history piece from Jim Vornholt, and it will run in the next issue. Jim traces his path in Stunt from starting out to his successes in the 1960s and beyond. It is not only a great read; it also has a goldmine of never before published photos from the 1960s era. Trust me, you will enjoy this one.

Another history piece that I can't wait to receive is the story of the Stiletto series of Stunt models by Les McDonald. Les is currently working on this piece and the small bits he has shown me are just great! This one will make you laugh at points. Les has a very acute sense of humor and he is one of the very best story tellers I've ever met.

If we can get enough modelers who lived through Stunt history in enough different areas and eras, we can begin to weave a fabric that will grow into a rich blanket that covers our event and lives on for generations to come. If we don't do this, then we will have missed an opportunity. So, old timers, learn to use a computer and start banging out those remembrances! While you are at it, get a good scanner and begin archiving those wonderful old photos you have stored away in albums and boxes before they fade away ...

While we are on the subject of historical pieces, check out Wynn Paul's History Column in this issue. He completes his look at the Scintillating Sixties and presents more great old photos.

There's no reason that a contest coverage article cannot be instructive and entertaining at the same time.

Contest coverage articles are always a big part of *SN*. Typically only the larger contests receive the feature article treatment. I want to change that. In order to get an accurate perspective of what is happening in CL Stunt nationwide, it is important that we occasionally visit the grass roots of the event. This means focusing on the local level contests from time to time.

Obviously we cannot cover every CL



Stunt contest that is held in the country or in the world, but we can pick a few smaller meets each year and highlight them in a feature article. In the last issue of *SN* we ran a short piece on the Joe Ortiz Memorial Stunt Bash that is held each year at Flushing Meadow Park, New York. It was a small meet, and the weather did not cooperate, but it did serve to show participation and it gave a dedicated group of fliers and volunteers a bit of recognition. It's this type of participation that keeps the event going on local levels and it is important to acknowledge that fact in a tangible manner.

So if your club runs a small to medium size Stunt contest and you would like to see it covered in *SN*, let me know as soon as possible. I'll assign as many of these reports as I feel we can handle in a year and then schedule different ones to be covered the next year and so on. Hopefully we can eventually present at least one feature article about each annual CL Stunt contest and then begin to repeat the process.

This seems an appropriate point at which to examine the elements of contest coverage for *SN* submissions. As our name implies, we are dedicated to CL Stunt flying in all of its forms. I'll entertain submissions about any form of CL aerobatic flying. What I won't accept is coverage of events other than CL Stunt. I know this seems harsh, but we have very limited space and we need to use it to fulfill our own goals and

interests. The other forms of CL flying have their own special interest groups (SIGs) and their own publications in which to report on their disciplines. So, if your meet is an AA or AAA type that features events other than CL Stunt, please report only on the CL Stunt happenings when you write for *SN*. You can certainly mention that other events were contested there, but please do not go into detail in covering any of those events.

I've always found that contest report articles are more interesting when the reporter focuses on the technical innovations, highlights of specific performances and interviews with fliers who have something new to show. Avoid writing articles that just list who flew and where they placed. Let's use these articles to pass on new ideas and procedures, and insights into the thinking of the pilots and the contest management. There's no reason that a contest coverage article cannot be instructive and entertaining at the same time.

Technical articles are also welcome here. It is important for all of us to read these pieces with open minds. For sure there will be elements in technical articles about which controversy will surface. Not everyone will agree with everything that will be written in these treatises. This is especially true when advanced aerodynamic and heavy math issues are presented. I'm not a math guy, and my aerodynamic knowledge is severely limited. (I usually subscribe to the "If it looks good it will fly good" school of thought and I typically design my planes by holding my thumb at fully extended arm's length while peering over said thumb chanting the phrase "That looks about right" over and over ...)

Because I'm not comfortable editing technical articles that deal with math and aerodynamic issues, I've assembled a "Technical Review Board." The members of this board have, in my opinion, broad experience and knowledge in various technical fields, and I will call on those members of the board who can detect obvious flaws in content. Different "experts" will be called upon depending on the subject matter of the article in question of course.

This process will be handled discreetly so as to not embarrass anyone. The hope is that if there is a problem with a submitted piece the author and the members of the Technical Review Board who were chosen to review the article can work together to bring to fruition a meaningful and fully accurate article

presentation that will benefit all PAMPA members.

Philosophical articles can be fun, thought provoking, insightful, inspiring and, well, dangerous! What motivates us—what gets our creative and/or competitive juices flowing—can be the most interesting subject of all. It can also be a subject in which we might be more prone to reveal a bit more of ourselves than we intended.

Personally I enjoy reading about what makes a person tick and what process a person goes through to get himself/herself to operate at high levels of creativity and awareness. If you write this type of article (or elements of this into a more "normal" article) be aware that some will just not "get it." Some might just think you are weird. Some might think you are preachy. Some might think you are too self absorbed. But, some will actually see the point you are trying to make and have their lives enriched by your willingness to share your innermost thoughts in a most public manner.

Two thoughts on this type of article:

I hope I've given you some incentive to put fingers to keys and generate some words for this publication.

One, try hard to stay on point as to how your insights relate to CL Stunt (in other words, touch base with reality from time to time ...) and two, don't let anything stray into the realm of politics! As I wrote at the beginning of my tenure at this post, there will be no politics allowed in *SN*! (Okay, none other than candidate statements at election time ...)

I hope I've given you some incentive to put fingers to keys and generate some words for this publication. I'd like to pass along just one more thing about writing for any publication. I do not believe that you need to become a "writer" in order to convey your thoughts on a subject. In fact, to think that way almost ensures disaster. I have never considered myself a writer. (Many out there will no doubt agree with my personal assessment ...) In fact, when I first tried to "write," it came across even to me as rigid and forced; I didn't "sound" like myself. If there is one thing I have learned about

expressing myself in print it's this: Write as if you are speaking to a friend who is sitting across from you at your workbench during a building session. Use the exact same words, phrasing, humor and candor that you would in a casual conversation. Be yourself.

If the above suggestion fails miserably for you, remember this: We are looking for information. Just get your thoughts down in a file and send it in. My job is to make you sound good in print! I'll "massage" your text and return it to you for review. We can repeat this process as many times as necessary to make you happy.

CL at the Southeastern Modelers Show

Mike Griffin contacted me and told me that his club, the Georgia Aircraft Modelers Association, sponsors the Southeastern Modelers Show every year in Perry GA. This year Mike was appointed as the Director of Control Line Events for the show. According to Mike, the show is huge, they have more than 1,000 vendor tables every year there, and it is attended by modeling enthusiasts who are vendors, pilots and buyers of all

products for all aspects of model airplane flying.

This year they are putting a lot of emphasis on CL suppliers and pilots, and are doing their best to attract more vendors from the CL world to come to the show. There will be CL demonstrations and even CL flight training available. Mike says that they could use all the help they can get from everyone involved in Stunt and all other disciplines of CL flying.

The show is scheduled for March 6 and 7 of 2009 at the Georgia National Fairgrounds and Agricenter, in Perry, Georgia. If you are interested in attending, here's a link to a website that will answer all of your questions about the show: <http://gamarc.com/georgia.html>.

I'm highlighting this here because these people are going the extra mile to include CL flying and products in their show. I think we need to acknowledge that and help them out if we can.

Contest scores and Contest Calendar Submissions: Everyone likes to see their name in print. I guess that's why the contest scores section of *SN* is so popular. I like it because I get to see how much participation there is across the country in our event. Whatever the reasons, this is a well read section. The sad fact is that many of the contest scores never get into print because they are not properly sent in to our volunteer who assembles this column. His name is James Mills, and he's ready to take your input and get it ready for presentation in *SN*.

The process is simple; e-mail your contest scores in a Microsoft Word file to James Mills at: jamesmills@centurytel.net. Be sure to include the names of the judges, tabulators, runners and other helpers; they are the ones who make these contests possible in the first place and they deserve the recognition!

The procedure for submitting Contest Calendar items is just as easy. Send the announcement of your contest in narrative sentence form and in Microsoft Word to me at robinhunt@rcn.com. Please do not send a contest flyer! I simply do not have the

time to keystroke in all the information about your upcoming meet. List the name of the meet, the date, the place, the time, and any additions or modifications to the existing rules for your event. Remember, you can change some aspects of an event (Elimination of the BOM rule, special requirements, etc.) providing you list them on the flyers that you send out and in contest announcements such as those that appear in *Model Aviation* and *SN*. Be sure to list the contest director and provide all necessary advance contact information.

A good way to increase participation at your meets is to make sure that they are well advertised, and you can do that here for free! Remember that this is just a text listing of your contest. If you wish to promote it further with a display advertisement (with graphics and maps, etc.), there is a charge for that.

Column call

We are still searching for a number of regular columnists. The columns that remain unmanned are: Flying, Classic Stunt, Old Time Stunt (I would entertain combining Classic and OTS if the right

person steps up to the plate ...), Workmanship and Finishing, Power Trains (this would be for just glow and ignition engines as we already have an E-Stunt column), and Profile and Sport Stunt.

I'm pleased to announce that Grace Paris has stepped forward to accept the post as columnist for the "Next Generation" column. Peter Germann has accepted the post of reporter for all of Europe and Scandinavia with his "Euro Column." And, Geoff Goodworth is going to handle the news from Australia and New Zealand in his "Stunt Down Under" column. Our thanks go out to Grace, Peter, and Geoff for their willingness to help out. I'm sure we will all enjoy reading their columns!

We still need column volunteers from the Eastern Rim countries (Japan, Taiwan, China, etc.), South America, South Africa (Keith, are you out there?), and Canada. (Kim, are you out there?) If I missed a geographical area and you live there and you want to contribute, by all means drop me a note!

That's it for me this month. See you all at VSC! Until then, fly Stunt! *SN*

Stunt News Publication Policy and Disclaimer

Materials submitted to *Stunt News* are accepted on an unpaid voluntary basis. It is expected that the work product will be that of the author. By submitting material, the author authorizes its publication in *Stunt News* and represents that the work is his own, and that he has the sole right to distribute it and authorize publication of it. In the event of dispute about the source of any material, *Stunt News* reserves the right to print such retractions and notices about such submitted materials as it shall see fit in its sole discretion.

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Ad and Editorial copy

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1/4 page: 4.75 x 3.50 inches	\$35.00
1/2 page: 4.75 x 7.00 inches	\$70.00
Full page: 9.50 x 7.00 inches	\$140.00

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SAO PAULO STUNT ADVENTURE

by Windy Urtnowski

During the summer of 2008, Thomas Case invited several stunt pilots to join him in Brazil for three days of flying, a contest, and a four-day tour of his beloved country. Current F2B World Champion David Fitzgerald and his wife Cathy, Howard Rush and his wife Marilou, my wife Karyn and I were lucky enough to accept Thomas's wonderful and most generous hospitality.

The contest site is right in the center of São Paulo, and I've never seen one quite like it anywhere in the world. It has two paved CL circles, a model boat pond, a dedicated building that has two

stories of model railroading, a model race car track, a restaurant, and clean restroom facilities. This complex resides in the middle of high-rise apartments and a park with a beautiful obelisk that looks much like the Washington monument.

While the practice flying was going on there were boats racing in the nearby pond, model trains in HO and Z gauge running, and a large crowd of spectators that included many children who seemed very entertained, observing. It's a very special place to spend three days flying along with a great group of passionate modelers.

Bene Rodrigues ran everything and

loaned his spare ships to the American visitors. He's quite a unique and gracious individual, who was with us all the time in Brazil to start motors, launch planes, and order exotic food for us in some wonderful restaurants. The food we had all week was the best I've ever experienced.

Howard Rush got to the field early one day while David and I went for a helicopter ride with our wives over São Paulo. There are no restrictions on altitude, so we got great photos—even great shots of the zoo—from the chopper. By the time we got back to the aerodrome, Howard was comfortable flying his *Shark*, which was on loan



from Thomas Case. It was a well-trimmed ship, and everyone's opinion was that Howard was flying it very well.

David chose the Chinese Yak loaner, and with some trim flights started showing why he's the current F2B World Champion. Bene Rodrigues loaned me his P-47 Thunderbolt, and I spent a few flights getting accustomed to it and making some minor trim changes to suit my comfort zone.

Contest day arrived with a few raindrops, but nothing even slightly spoiled our fun, and the ultimate top dog was Howard—a well-deserved win, we all agreed. Many of the

Upper right: Fresh back from hang gliding in Rio, Windy Urtnowski got to fly Bene Rodrigues's really awesome P-47 to fourth place in F2B. Windy was also seen driving Thomas Case's 427 Cobra down the winding streets in São Paulo.

Lower right: World Champion David Fitzgerald flew Yak that Han Xin Ping flew at the 2004 and 2006 World Championships. Thomas Case purchased this model from Han in Spain in 2006. With it David placed third at the contest.



Bene Rodrigues built and flew this gorgeous Super Tocano that is based on the full-scale Brazilian aircraft. Laser-cut kits of this model are available through Bene. If you are interested, contact Bene at aerorodriguez@terra.com.br.



contestants had been to our Nats and the Brodak Fly-Ins in the past, and after the meet we got to fly several of their ships and offer thoughts on trim.

After three days in Saõ Paulo, we went to Thomas Case's summer residence in Guaraja and had fabulous meals, got to drive some of his personal sports cars, spent time on his boat, and had a vacation we'll all never forget.

Several of the Brazilians will be coming to the Nats this year. Thomas Case Jr., Thomas's son, is improving his skills quickly, thanks to the coaching he's getting from Bene Rodrigues.

We ended our week with a day of hang gliding in Rio de Janeiro. Howard left a day early and missed a chance to jump off a cliff a few thousand feet high. David and I—with our instructors—had awesome flights. Thomas and Bene got in great flights, too. I hope David got a few good photos—he took stills, and I shot video of Rio from a hang glider riding the wind in thermals. What an adventure!

Our gratitude is extended to Thomas Case, Bene Rodrigues, and Suzy Moniz, who made this dream a reality and one of the most memorable vacations Karyn and I have ever had. *SN*



Above: Howard Rush chose very wisely and flew the excellent Yatsenko Shark that is owned by Thomas Case Jr.

Left: Thomas Case Jr. and Mayara Moniz take a moment to reflect on the amazing happenings at their home field.



Bene Rodrigues receives his second place trophy from host/sponsor Thomas Case.



Thomas Case congratulates contest winner, Howard Rush.



Current World Champion, David Fitzgerald receives his third place trophy from Thomas Case.



Here is Bene Rodrigues with his Super Tucano, posing at the spectacular flying site.

Above and Top: Host extraordinaire, Thomas Case, wipes the burnt fuel residue from the Yak that David Fitzgerald flew as Howard Rush holds the model for cleaning. World Champions get really great treatment! That's some exclusive pit crew...



Above: Windy Urtnowski, Bene Rodrigues, David Fitzgerald and host, Thomas Case pose for the clickers.

Raul Buchler displays a very colorful, Windy Urtnowski-designed ARC Strega.

The Karl Marschinke **Memorial Control Line Contest**

by Robin Sizemore; photos by Rickii Pyatt

This year's Karl Marschinke contest was interrupted by heavy winds on Saturday, which forced a cancellation of the second round for both Old Time Stunt and Classic Stunt. The final placings for these events were decided by first

round scores—for those who got a first-round score!

The folks who came to fly in the Combat event were totally blown out to the point that no official matches were flown. One of the Scale entries managed one flight and no one else



October 4 and 5, 2008
Christopher Columbus Park
Tucson, Arizona

Igor Panchenko flies his original-design model in Expert Stunt



was able to fly. The outcome was decided on the static points and the one official flight. By noon on Saturday the first day of competition was over.

Sunday was better with all the Carrier flights being completed. And, most of the Stunt competitors got to fly twice. Igor Panchenko brought his friend Sergiy Byleko to the contest this year. It was a first for us here in Tucson to have both of these gentlemen attend the



Igor Panchenko lives in California, but is originally from the Ukraine.



contest. Sergiy won Expert and Igor was third behind Bob Whitely.

By Sunday noon, the wind once again had picked up to what it had been for Saturday, the difference being flying continued despite the windy weather. Rickii Pyatt took a lot of pictures and fortunately they tell a better story about this contest.

All in all and despite windy weather, the contest finished on time and some very good flying was seen.

Left top: Jon Standing Bear shows off his Doodlebug. Jon placed first in Beginner. He makes his home in Sierra Vista, Arizona.

Left bottom: Gary Gingerich flew in Advanced with his Stuntcrab. Gary is from Safford, Arizona.

Below: Tricia Duffy lovingly wipes the burnt castor from her son, Michael's, Profile Cardinal.

Right: Glen Allison from Tucson placed third in Advanced flying his very clean Oriental.

Far right: Lew Corbett from Tucson flew his original-design profile Lear Jet in Advanced.

Lower right: Robert Compton from El Paso, Texas, flew his veteran Cobra 7 in Expert.







There were two of the club's newest Intermediate fliers entered in the contest: Sean Chuang and Rick Green. Sean won and Rick finished second. They both challenged the wind and both did a good job flying in it.

Micheal Duffy was second in Profile Stunt Advanced and won in Advanced. He said at the end of the contest he would be flying expert at the next contest: January 2009.

Jon Standingbear took first in Beginner. Jon had been in the hospital in the early part of the year and went through a lengthy recovery. It was great to see

Left top: Keith Trostle from Tucson is holding his original-design Focke Wulf TA-152. The design is now 44 years old making the plane Classic Legal (not to mention Keith, who is Old Time Legal—Ed.). This design is now being kitted by RSM.

Left bottom: Warren Tiahrt, now from Tucson, is holding his Lunar. Warren placed second in Advanced with this Classic Plane.

Below: Lou Wolgast, from Tucson, flew his original-design Fury in Classic and in Expert Stunt. This yet another new RSM kit!





Above top: From right to left: Sergiy Byleko (also from the Ukraine), Rene Berger, Igor Panchenko, Keith Trostle, and Warren Tiaht. Byleko's take-apart airplane is shown disassembled on the ground.

Above middle: CD Lou Crane and Ken Gulliford recording final placing and scoring information.

Above: From left to right: Sergiy Byleko, Rene Berger, and Igor Panchenko. Sergiy is preparing to fly.

Top right: Robin Sizemore from Tucson is holding a Robert Whitely-designed Derringer. The design is 33 years old and is still very competitive, just like Robin!

Bottom right: Ed Capitainelli displays his newest model: a Jamison Special. That's nice lettering on the wing, Ed! Ed lives in Tucson.



him flying in competition again.

A big "thank you" goes out to Ted Kraver for getting the Carrier deck to Tucson so that we could use it (despite his absence due to a prior commitment). Thanks also to Ken Gulliford for filling in as event director for Carrier in Ted's absence. Thanks are also in order to Burt Brokaw for hauling the deck to the field Sunday for the competition. Without these three people working together we would not have had a Carrier event at the contest.

Next year we hope the weather will be kinder to us. The 2009 Karl Marschinke Memorial will be held September 26 and 27. Please come and join us. *SN*

Above: Bob Whitely with his Hawker Hunter. This airplane was designed by Bob in 1969, making it 30 years old and Classic Legal. Bob was first in Classic and second in Expert with this plane.

Right: Leroy Polk, from Phoenix, Arizona, flew at this contest for the first time. He's holding a Brodak P-40, which he flew in the Profile Stunt event.



Stunt Results from Karl Marschinke Memorial Control Line Contest

Old Time Stunt

1.	Bob Whitely	287.0	Pass
2.	Jim Hoffman	286.0	Pass
3.	Robin Sizemore	254.0	Pass
4.	Lou Wolgast	231.0	Pass
5.	Keith Trostle	81.0	Pass
6.	Burt Browkaw	Pass	Pass
7.	Nick Lemak	Pass	Pass
8.	Glen Allison	Pass	Pass
9.	Leroy Polk	Pass	Pass
10.	Michael Duffy	Pass	Pass

Classic Stunt

1.	Bob Whitely	518.0	Pass
2.	Lou Wolgast	509.0	Pass
3.	Jim Hoffman	482.0	Pass
4.	Warren Tiahrt	472.5	Pass
5.	John Callentine	471.0	Pass
6.	Michael Duffy	431.5	Pass
7.	Burt Brokaw	430.0	Pass
8.	Keith Trostle	Pass	389.0
9.	Robert Compton	Pass	Pass
10.	Lew Corbett	Pass	Pass
11.	Glen Allison	Pass	Pass
12.	Gary Gingerich	Pass	Pass

Profile Stunt Expert

1.	Lou Wolgast	503.5	529.0
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Profile Stunt Advanced

1.	Burt Brokaw	503.0	486.5
2.	Michael Duffy	481.0	423.0
3.	Nick Lemak	460.5	Pass
4.	Glen Allison	453.0	Pass
5.	Rick Green	397.5	Pass
6.	Leroy Polk	303.5	Pass

AMA 323 Beginner Skill Class

1.	Jon Standingbear	45.0	Pass
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AMA 324 Advanced Skill Class

1.	Michael Duffy	489.0	487.0
2.	Warren Tiahrt	476.5	460.5
3.	Glen Allison	399.0	452.0
4.	Burt Brokaw	Pass	403.5

5.	Nick Lemak	385.5	Pass
6.	Lew Corbett	314.0	Pass

AMA 325 Intermediate Skill Class

1.	Sean Chuang	389.0	410.0
2.	Rick Green	359.0	351.0

AMA 326 Expert Skill Class

1.	Sergiy Byleko	552.0	517.5
2.	Bob Whitely	470.5	541.5
3.	Igor Panchenko	524.0	526.5
4.	Lou Wolgast	516.0	Pass
5.	Keith Trostle	514.5	213.0
6.	Jim Hoffman	499.0	485.0
7.	John Callentine	493.0	495.5
8.	Robin Sizemore	470.5	457.0
9.	Robert Compton	425.5	Pass

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Transparent Finishes

By Pete Peterson

Bob Hunt asked if I would write an article on transparent finishes and the methods and products I use. Stay with me if I repeat things or ramble a bit. Some of this is worth repeating, the rambling is just me being me. I hope our esteemed editor can make some continuity appear on these pages.

Where to start? For some if not all, this will be “old hat” and repetitive. I hope each of you will get something out of it. I can only vouch for the methods and products I use.

Other combinations work, but

either I have not used them or tried them and decided not to continue. Here we go ...

Transparent finishes by their name show everything: good craftsmanship and bad. Accurate, clean, tight fitting wood joints are a must, as is the choice of wood. Try to pick wood that will be seen on the surface of the model that contains no blemishes, dark spots, or chips and dents that will need to be filled. Save your blemished wood to use on internal structure that won't show.

The use of most fillers, putties, and patches are pretty much a no-no as they also will show through a transparent finish. The filler that I use is zinc stearate. It is compatible with dope and mixes easily. I mix it with the reducer first and then add the dope. It is extremely light and dries clear. It is available from Aero Products. (See the sources column at the end of this article.)

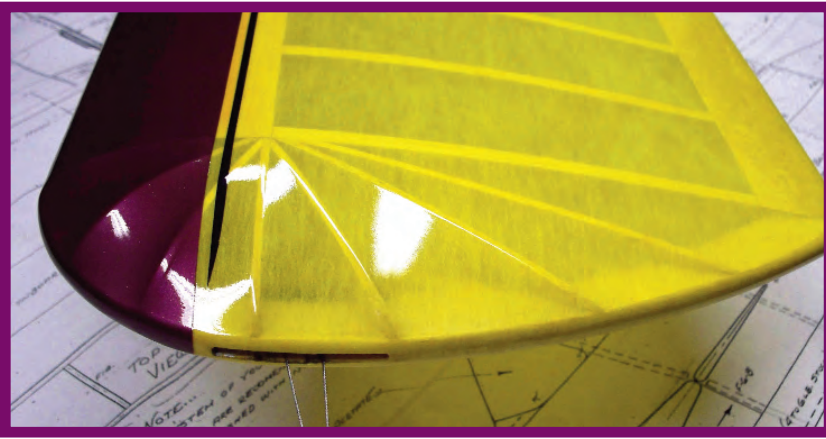
I want to discuss a little more on wood joints. I have been using a great method to hide wood glue joints on the surface areas for some time now. I could not remember where I picked it up until I was doing some research for this article. I will write more on that a bit later. When gluing top blocks, nose blocks carved or molded wingtips to wings, bottom blocks or any other joint that will show on the surface, try the following.

The glue should be a 50/50 mix of a sandable aliphatic resin such as Sig Bond or original Titebond and water. Using a cotton swab and water, wet both surfaces to be joined. Apply a thin even coat of the glue

The author's new Jamison Special is covered with polyester tissue. He used House Of Kolor Lime Gold, Sig Metaic Maroon and Jet Black trim colors. The total weight of the finish from bare wood is 3.78 ounces.



Here is a close up of Jamison canopy and wing fillets.



Polyester tissue neatly and seamlessly conforms to compound curves.



Fin and stab fillets and the cloth hinges on the Jamison are almost invisible.



The author uses and recommends Aliphatic Resin glue, such as Sig-Bond or Titebond, on all external wood seams.



Pete uses Bob Smith Industries' 20 Minute Finish-Cure epoxy and various color micro balloons to make the fillet material.

mixture to both surfaces and join. Wipe off as much excess as possible using a dampened paper towel and tape or clamp the parts together tightly until the glue has dried. I usually wait overnight depending on temperature and humidity.

With the swelling of the wood and the sandability of the glue the joint will be almost invisible after sanding. Aliphatic resin is not reactive with dope and will remain smooth as the model ages.

Another use for water: Dings, dents, and small chips can be raised by wetting the dinged area with a wet cotton swab. The balsa will swell and the area can be sanded smooth when dry. Deeper dents and bigger dings may require you to use a MonoKote heat gun to help promote the swelling of the balsa. It's amazing how well this works, so if you make a big boo-boo, don't panic until you try fixing the damaged area using this method.

If you feel that a putty-type filler is needed, try the lightweight vinyl spackle from home improvement stores. It is not reactive with dope and does not shrink. Depending on the color of the finish and size of the ding it will be almost invisible. The best way to avoid having to fill or fix any dents or dings is to not make them in the first place! Keep your workbench clean and clear of tools and other items that can ding a model and you will not have to worry about fixing them later ...

I will try to put the following info in a very general building order and try also to explain the reasons behind what I use and how to use it. Start with a perfect bare bones airplane. Yeah, right. Spend extra time sanding and candling the

surface of the airframe until it is as close to perfect as you can make it. Candling is a process in which you hold the airframe up to an incandescent bulb and bounce light off of every area, working very slowly and being extremely critical of any shadows, low areas, high areas, etc. When you identify an area that is not perfectly smooth, stop and detail sand that area to blend with the surrounding areas. This process can take hours, but the result is a much more perfect airframe on which to apply a finish.

I cover all my wings, flaps, stabs, elevators, and some cowls with polyester tissue. I prefer Polyspan brand but I have been having trouble finding a source for it lately. Bob Hunt informed me that a modeler named Larry Davidson carries Polyspan and also a new version of the material called Polyspan Lite. I have used a lot of the polyester

tissue that is available from Tom Morris with good results. This same material is also available from Jim Snelson at Control Line Central.

Why polyester tissue? It is light, tough, seals and fills fast, and will form around compound curves readily with the aid of a MonoKote iron. It allows you to have fewer seams and less piecing. (Remember, everything shows with a transparent finish!) An entire article could be written about covering with polyester tissue—but not this article.

Silkspan or silk should also work; I just don't care to use them, although I do use Japanese Tissue and lightweight silkspan for covering fuselages.

Okay commercial time. Bob Hunt's Stunt Flyer Video Magazine Volume 1, Number 3 has a segment featuring Mike Spedaliere, who is a true master builder. Mike explains and shows three great building methods you should be aware of. The first is a method that Mike uses to cover with silkspan or Japanese Tissue that yields a virtually seam free appearance. The second is a method for installing balsa fillets, and the third is the gluing method I mentioned earlier. This is a very professionally done video. I am sure you would enjoy it.

Okay the masterpiece is covered. The next step is applying the fillets. I prefer to apply the fillets after everything is covered and a couple coats of dope have been applied to the airframe. What I want to do is briefly describe my method of applying fillets and how they relate to transparent finishes.

I use three products, two of which are readily available. The first is Top Flite White Micro Balloons, the second is Bob Smith Industries 20-minute Finish Cure Epoxy and the third is Dave Brown Products' Phenolic Micro Balloons, which are brown in color. If you cannot find the Dave Brown product, I have been told that West Systems carries some, but it is only available from them in larger quantities.

A bit about the 20-minute Finish Cure epoxy: It is very thin and soaks up a lot of micro balloons and is very easy to sand. FYI, Bob Smith products are the ones found on the shelf with the local hobby shop name on the package.

I am going to take a second here and explain why I use this method. When blending the brown and white micro balloons I can adjust the color to match the surrounding wood. This material is very

light, and quite durable; I have had no cracks in several hundred flights on four models.

Be sure to mask the areas in which you will apply fillets. I mask over the wing chordwise, and lay the tape out on the wing just far enough from the fuselage to allow the radius of the fillet to be formed. The next piece of tape goes on the fuselage and

follows the curve of the wing, just far enough above the wing to allow the fillet radius to be formed.

Mix only enough material to fillet two wing panels, then mix more material and apply the fillets to the other two panels. I fillet all four stab panels and the fin at the same time with one mix. In other words I don't mix too much at a time.

How much material should you mix? A lot will depend on how large a wing you are doing and how large you want the fillet. On full size Stunt ship I will usually mix 25 to 30 drops each of epoxy and hardener in a plastic mixing cup and I use a 6-inch piece of $\frac{3}{32}$ inch diameter music wire with the ends rounded as a mixing stick. This tool is also handy with which to apply the material to the model.

I keep a squeeze bottle of premixed white and brown micro balloons tinted to a light tan (medium balsa) color. After mixing the epoxy completely, I slowly add the mixture of micro balloons to the epoxy; I want a fairly thick consistency at this point.

I then add either white or brown balloons to get as close to the required color as I can. Adding balloons also thickens the consistency of the mix. I want a consistency that allows the material to hold a "peak" as I remove the mixing tool.

Be aware that the cure time is lengthened greatly with the addition of the micro balloons. Spread the mixture onto your fillet area. It does not need to be even at this time; just try to get some material all along the area.

Now take out your specialized fillet forming tools ... Huh? Okay, a ball bearing glued to a piece of scrap wood, a round flashlight bulb, or nicely rounded piece of scrap wood will do the job. If you use any of the above use it wet. Water or rubbing alcohol will work fine for this; just keep the tool clean and wet.

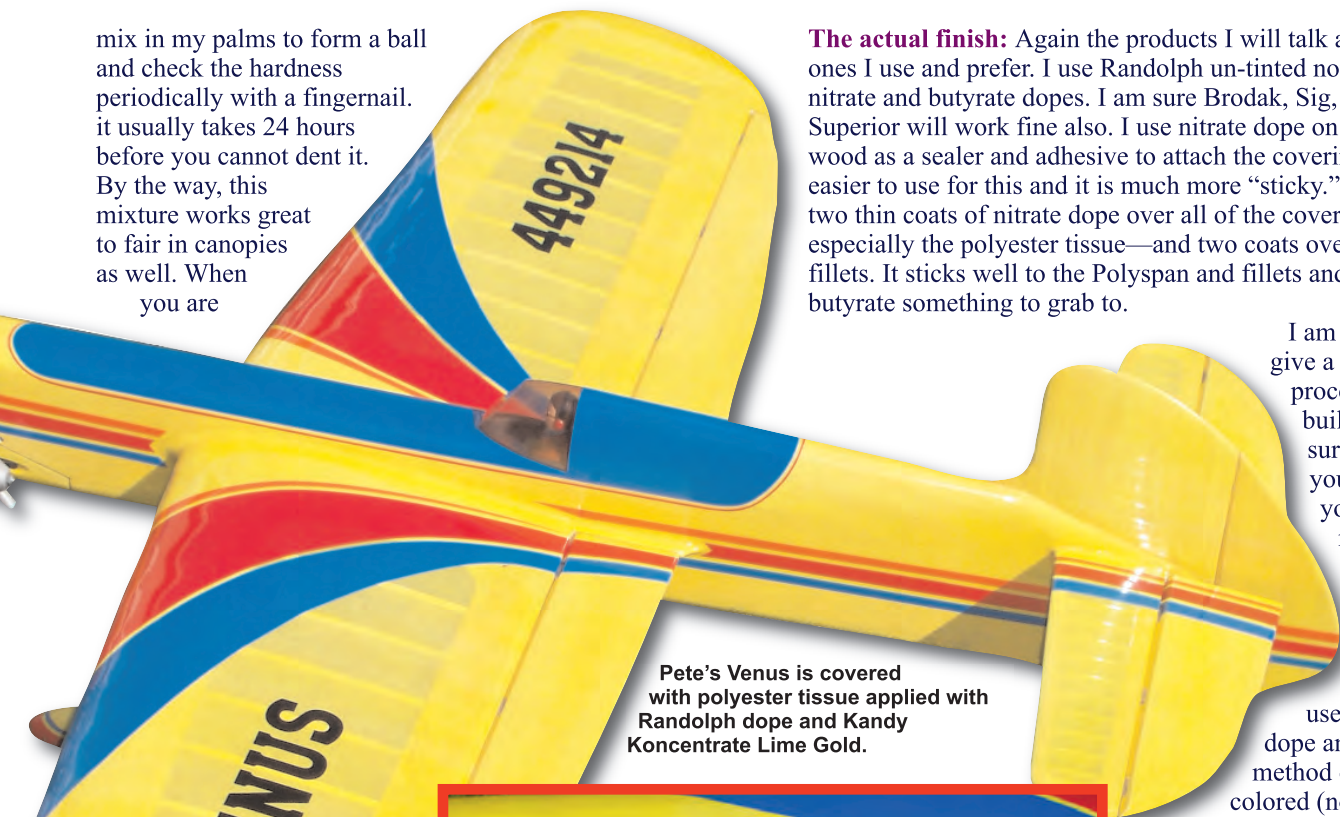
Now remember your application will be staggered time wise and at about 45 minutes after installing the fillets, remove the tape and feather the edges and ends of the fillets with a wet finger. Do this gently and try not to let your finger get into the actual radius of the fillet. You are looking to just smooth the edges where the masking tape has left a "lip." When you have finished, let it all set up for 24 hours.

The way I gauge if the material is set is to roll the left over

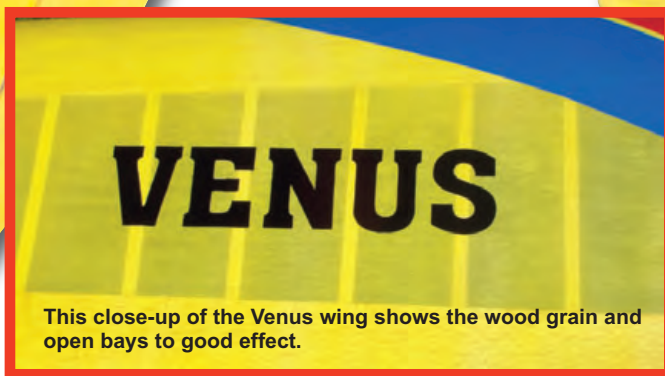


Here are the canopy and wing fillets on Pete's Rondinelli Venus.

mix in my palms to form a ball and check the hardness periodically with a fingernail. it usually takes 24 hours before you cannot dent it. By the way, this mixture works great to fair in canopies as well. When you are



Pete's Venus is covered with polyester tissue applied with Randolph dope and Kandy Konzentrate Lime Gold.



This close-up of the Venus wing shows the wood grain and open bays to good effect.

sure the fillets have cured thoroughly, sand them well using sandpaper wrapped around a dowel that is the same radius as the fillet. Epoxy can be a challenge to sand, but the micro balloons help make this process a bit easier. After the finish is applied it will be difficult to distinguish the surrounding wood from the fillet. Remember, everything shows.

The actual finish: Again the products I will talk about are ones I use and prefer. I use Randolph un-tinted non-tautening nitrate and butyrate dopes. I am sure Brodak, Sig, Certified, or Superior will work fine also. I use nitrate dope on the bare wood as a sealer and adhesive to attach the covering. I find it easier to use for this and it is much more "sticky." I also apply two thin coats of nitrate dope over all of the covering—especially the polyester tissue—and two coats over the sanded fillets. It sticks well to the Polyspan and fillets and gives the butyrate something to grab to.

I am not going to give a step-by-step procedure on building up a flat surface finish; you all have your favorite methods. Just remember, use no gray or silver here; it has to be clear. I use the good old dope and sand method even on colored (not dyed) finishes. The first dope with pigment I use is the base color coat. Again if you feel the need for a filler use zinc stearate as it is undetectable under the finish. Just remember to apply a light coat of clear over the last filler coat.

As you near the end of the build-up coats, candle it often looking for shadows (low spots) and the little sparkles also reveal low spots. Sunlight works best

for this but you can use 100 watt incandescent bulbs in a reflective holder; fluorescent does not work well at any wattage.

When you are satisfied vacuum the airframe or use low pressure air to blow off the dust. Then use a tack rag, and then wash it. Huh? Well sort of. There are automotive products available that do work, but I picked up the following tip from Phil Granderson: use Windex to clean the airframe. Wash and dry the model at least twice, tack it again and you are ready for the fun part: transparent colors.

Now I am going to ramble a bit. Those of you who know me, or know who I am, probably also know I like yellow; loud, bright, yellow. I have used other colors but always came back to yellow. Before I was really into modeling a good and dear friend of mine, Gordan Delaney built an ST .46-powered Stunter, and it was yellow. Not transparent yellow, just lemon yellow with red and blue trim. I thought it was the most beautiful stand out in a crowd model I had ever seen. Then, of course there was his magnificent yellow twin. Okay with that out of the way on to the finish.

I chose the transparent look because of the



Here are the Kandy Konzentrate KK-11 Apple Red and KK-02 Lime Gold products. The Lime Gold is the bright yellow that Pete uses on most of his models.

weight, or lack thereof. There is no pigment in the base color, and the beauty, no matter what color is used is amazing. I love the look, wood grain, sun through the open bays, and the amazing number of colors that are available.

I have used two “dye” products. One of these I’ve tried in a very limited manner, so I will write about the other one ... If you know of similar products please share your knowledge with me and the other PAMPA members.

The products I use the most are from House Of Kolor and are named Kandy Koncentrate. They are automotive paint products and have UV blockers; they do not fade. They are available from most auto paint stores. If you can’t find them locally, check the House Of Kolor website for dealers close to you. The Kandy Koncentrates have a part number starting with K-K followed by two digits for the colors and they come in handy 8 ounce round cans with round screw top lids. They are easy to open and easy to pour.

One can of Kandy Koncentrate is enough for three or four classic size models at least. It is very concentrated and does contain a small amount of transparent pigment. Do not strain this out!

Ask the dealer to allow you to look at the House Of Kolor color chip catalog. The colors are shown over various base colors and unfortunately they are not shown over white. You will have to look closely to decide which color you want to use. The bright yellow I use is called Lime Gold, and it appears as gold if sprayed over silver. This product mixes perfectly with all the normal dope including nitrate and Aero Gloss.

The method: I admit I am not very good with mixing ratios and amounts, so this is going to be an “about that much” sort of thing. Start with about 1½ ounces of the dye. Mix it with about 8 to 9 ounces of reducer and about 4 to 5 ounces of dope. Thin it and retard it for your particular equipment and local weather conditions.

You will want to apply the colored dope in two fairly light coats. This is just to dye the existing layer of dope. It goes on evenly without strips or splotches and does not darken much with additional coats. Okay, since you just put a lot of reducer on, you should let it gas off for a day or two. Then follow with a light coat of clear dope.

You are now ready to mask for trim colors. By the way I use dope from the bare wood up to and including the top coats; I am sure automotive clear coat on top will work just as well. I use some Sig colors that are no longer available, as well as Randolph colors and auto toners mixed in clear dope. For you guys who like to use dope I have the good fortune to live very close to a company named Spencer Aircraft; they are a full line Randolph dealer and have at least two very knowledgeable Randolph factory-trained employees.

I’m going to throw out some more really neat products. Dry pearl powders come in many colors, they are nearly weightless, and they are sold by the gram. Again House Of Kolor has this product available. They can be mixed in the dye coats, under the dye, over the dye or in the top coats. Use your imagination. Randy Powell has used these more than anyone else I know. Some of his combinations are really “cool” (Randy word). There are also three sizes of metal flake that are also available in many colors. The key word here is: Experiment!

Finishing the finish: Again use your favorite method, or do what I did and ask an expert! Phil Granderson explained how he rubs out a model and let me take notes (slow), but then he published his great method of rubbing out a model in his “CL

Aerobatics” column in *Model Aviation* magazine in March of 2007. I use the tools and products he recommends and uses. It is fast, easy, and simple. You can rub out a full-size Stunt model and wax it in but four or five hours of work and it will look shiny and “wet” when you are finished. **SN**

Sources:

Aero Products

www.aeroproduct.net
(678) 407-9376

Larry Davidson

Polyspan and Polyspan Lite
samchamp@jetbroadband.com
(540) 721-4563

Tom Morris

Polyester covering material
ctmorris@cableone.net
(256) 820-1983

Control Line Central

Polyester covering material
www.clcentral.com
(505) 332-8007

Robin’s View Productions

Stunt Flyer Video Magazine
robinhunt@rcn.com
(610) 759-8813

Top Flite

White Micro Balloons
www.towerhobbies.com
(800) 637-4989

Bob Smith Industries

20-minute Finish Cure Epoxy
www.bsiadhesives.com
Local Hobby Shop brand

Dave Brown Products

Phenolic Micro Balloons
www.dbproducts.com
(513) 738-1576

West Systems

Phenolic Micro Balloons
www.westsystem.com
(866) 937-8797

House Of Kolor

Kandy Koncentrate transparent colors
www.houseofkolor.com
(601) 798-4229

Spencer Aircraft

Randolph dope
16923B Meridian, East Puyallup WA 98375
www.SpencerAircraft.com
(253) 848-9349 or (800) 424-1160

The Club Trainer: If your club is like ours, you probably get involved in “flying the kids” activities once in awhile. For our club, Northern Virginia Control Line, this activity sort of rises and ebbs over the years. But there seems to be a minimum level that we always do. Some years we end up doing our “flight training” with church youth groups or with the Scouts. Some years it ends up being flight training with individuals or families that happen upon the flying site.

Our club also participates in the Dulles Days for Special Olympics event each year where we do an average of 60 to 75 trainer flights with kids. In any case, an important accessory to your flight box, fuel, and a freshly charged battery when you head to the flying field should always be a trainer. You just don’t know when a newbie might drop in. And rather than regretting it later with a lament like, “Gee, that guy was really interested in Control Line, I wish I had brought a flight trainer with me,” wouldn’t it just be easier to make sure you always pack your trainer plane into the back of your van (back seat/trunk of your car)?

Many of you can’t take a trainer to the flying field because you don’t have one. Come on guys! This should be a basic. People aren’t exactly running to us, so when we do find someone with

that little spark in their eye, why not fan it into a flame by giving them a flight on your trainer? Now maybe you don’t have a flight trainer—and maybe

This might be a local fly-in or air show for the public. It might be a major public event put on for a charity. It might be something your own members

“Nothing wrong with having a trainer fleet.”

that is for lack of recommendation “what should I build?” Or you just don’t have time to build one. Or maybe you just need a little push to get one built. Well, here’s a suggestion: have a club contest to build trainer planes!

The members of your club who like to build might like a new challenge and the result will be a fresh crop of trainers. You can make the contest as simple or as challenging as you want. You could do a one-design contest and have everyone build the same plane (for instance you could all build the Sig Shoestring—more about this recommendation below) or you could go for original designs. Any of these can be fun. But the result would be the same—a bunch of new trainer planes ready for action. Considering the attrition rate of flight trainers during training sessions, this would be a good thing. Nothing wrong with having a trainer fleet!

Does your club do a “Big Event”?

come up with, for instance, a display at the local mall. While challenging, these can be a source of club growth—and not just in membership. Participating in a Big Event can really strengthen a club. It can energize some of your members by letting them use talents not normally on display at the flying field. It will call for capabilities that are not normally needed or seen at your club building sessions (you do, of course, have club building sessions during the off-season, don’t you? Please, please say “yes!”) But if the Big Event has flying involved, make sure it includes flight training. For a full day of serious, everybody gets to fly a trainer, activity you will need at least four or five trainers. Again, having a club contest to build trainers is a way to fill that need.

Some of you might be asking “but how do you make a contest out of building trainer planes?” It’s easy! And it can be a lot of fun as long as it doesn’t get too serious. (Remember that our basic objective in building and flying model airplanes is to have fun!) You can have judging be a two-part

“And don’t forget the flight certificates”

assessment with scores for craftsmanship (or beauty, or usability, or ...) and flying. How to judge the flying? Maybe have it be a true test and let some newbies check the trainers out. If they are hard to fly or break easily, well there are your criteria. But from the get-go it should be understood that the trainers will be donated to the club for use in flight training. They all get to go out in glory at some point with a newbie at the handle!



Two different families showed up at the field and flew our trainer.



Here we did a "Ground School" with a group of Girl Scouts.

For a trainer, the easiest and cheapest route is probably the Sig Shoestring racer (kit number SIGCL13). It's easy to build, has perfect dimensions for a trainer, and is relatively robust. I have included our NVCL specification sheet that identifies most everything needed to build one. You will probably want to laminate the center section (about 3 inches wide) of the wing with 1/64 plywood to strengthen it. Also remember to "detune" the control system. Insert a metal tube into the fuselage where the wire gear ends are inserted. Engine-wise you can buy something new in the 15 to 25 size range

(and control speed with the prop pitch for the larger engines) or buy a used Enya or K&B .19 off eBay. You can often find them for very low prices.

Also, make sure you put together a "specification" or "purchase sheet" so your new pilot knows what to get so he or she can build one of his or her own. I have included a copy of the specification sheet that NVCL produced to hand out at Dulles Days. We also hand this out to visitors or new trainees at our flying site.

You still have time this building season to have a Trainer Building Contest. Get going!! **SN**

Equipment List for CL Trainer Airplane

Sig Shoestring Goodyear Racer. It has a solid wing, nicely designed, for a .15 size engine, and should be a great trainer. I notice it also has a great price. Product Code SIGCL13.

Also take a look at the **Sig Buster.** This is the sister ship to the Shoestring. Product Code SIGCL12.

Fox .15 engine. Product Code FOX15010.

Fuel tank size is 1 oz. Product Code SUL735.

100# line connectors. Product Code SUL149.

Lines should be 52 feet of .015 diameter. Product Code SUL131.

Control-line handle. Product Code SUL166.

Use 2-inch-diameter wheels. (Kit specifies smaller wheels, but that is for racing. These need to take-off and land in the grass.) Product Code DUB200SL.

Propeller, 8 x 6. Product Code ZIN203

Please note that these products can be purchased from:

Chantilly Hobby Shop
14014-D Sullyfield Cir.
Chantilly VA 20151
Phone them at (703) 631-8820
(Note that this hobby shop is near the corner of Rt. 28 and 50.)

These products can also be ordered from Sig Manufacturing at (641) 623-5154.



And don't forget the flight certificates!

CL Stunt at the Brodak 2008 Fly-In

Story and Photos by Will Hubin



Sergio Hernandez traveled from the Canary Islands along with his wife, Soly, to compete in OTS with this Enya-powered, take-apart ARF Smoothie.

Each of the major CL fly-ins/contests has an appeal that just keeps on attracting fliers year after year. VSC begins the year, in March, featuring Vintage and Classic designs against a stunning backdrop of blue sky and regal mountains, in temperatures that only those recently shoveling snow can really appreciate.

The judging level is high. There are no skill levels and the entries are very large, so most fliers come for the pure pleasure of beginning a new flying season on excellent flying circles, for the chance to advance their placing, for the camaraderie and, often, to showcase a new example of an old design. The weather is almost always excellent—except the brilliant sun may be downwind and the wind may pick up late in the day.

For most fliers, the Nationals mid-year are what definitively decide the year's top

Right: Norm Liversidge concentrates on level flight during an Intermediate Profile Stunt pattern with his Sig Primary Force.

Below: Thomas Case Jr. releases Bene Rodrigues' colorful Ringmaster.



circles are all paved and in very good condition, with plenty of room for on-deck planes. Because of the flat terrain, the winds can be quite strong but they usually are relatively steady, and there are no trees to add turbulence to the air. Being the Midwest, summer weather can bring strong frontal activity and trouble for fliers.

June and the Father's Day weekend are when much of the country's midsection Stunt community wakens and assembles in John Brodak's backyard for what is more of a fun fly-in than a contest, albeit the competition for the top spots can be fierce. In 2008, the first day (Tuesday) was devoted to profile designs, the second to Classic, the third to Old Time Stunt, and the fourth and fifth to PAMPA Stunt. (This is the only major contest/fly-in that covers almost all of CL flying: Foxberg and Clown team racing, three Carrier classes, three Scale classes, women-only class, junkyard airplane building/Stunt flying, and speed-limit Combat are also practiced.) Four flying circles are in the backyard and two (including the only fully paved one, for Scale and Stunt practice) are some distance away.

Two invasions from afar made this year's Fly-In especially interesting: Top VSC competitor Bob Whitely journeyed from Tucson and Team Brazil (sponsored by Thomas Case and

previously appearing at the Nats), some 22 strong. Bob Whitely won first place in Profile Expert with a borrowed Big Dog, another first place in Classic Expert with his Hunter Hurricane, sixth place in OTS Expert with a borrowed Humongous, and third place in PAMPA Expert with his Hurricane! The Brazilians competed in almost all the events, every day, using take-apart Ringmasters and attractive, newly-built Super Tucanos (modeled after their Air Force trainer); they also jumped into the junkyard wars competition on the spur of the moment and won third place, carrying their winning Stunter (Thomas Case, Jr.) off the field on their shoulders in triumph!

There is so much flying activity throughout the day that it is hard to know where to go. Uniquely, fliers can take advantage of this by getting in up to eight official Stunt flights, if they wish to enter each day. And the long days in June allow plenty of practice and fun flying in the afternoon and evening (Dan Banjock's MiG-15 jet CL Scale model, prancing Bi-Slobs, etc.). With the constant activity and the many different events, it is by far the most interesting fly-in or contest for non-flying visitors and their families—who also are often given the opportunity to try some CL flying. Unique to this fly-in, too, is



Bob Whitely came all the way from Tucson, Arizona, to enter his first Brodak contest. He placed first in Expert Classic Stunt and third in PAMPA Expert Stunt with his original-design Hawker Hunter.



RUSSELL RA ATHLETIC
ESTABLISHED 1987

Florida's Eno Juares flew this unusual but beautiful stunt model. Note the intricate trim scheme. He fell victim to the thunderstorms which negated a high second day score.



Above: It's Banquet time at the Fly-In. This is a tradition that John and Buzz Brodak instituted early on in the Fly-In's history and it is one of the most popular features of the week.

Volunteer servers Elena Saunders, Heidi MacBride, Sue Tarnofsky and Sue Emens dish out the fried chicken (far right). Another serving line featured servers Karyn Urtnowski, Shelly Gordon and Loraine Lumley (right).



the buffet banquet sponsored by John on the evening before the final day.

Among the electric competitors, Mike Palko's new P-51 Mustang (sixth place in PAMPA Expert) and Archie Adamisin's surprising, Brodak-powered Oriental were particularly noticeable. Windy Urtnowski always brings a gorgeous model, and this year was no exception; his Ro-Jett .90-powered Spitfire took first place in PAMPA Expert. Kent Tysor took second place, Bob



Above: Brad Smith chose to fly his unique Ultimate Bipe in Intermediate Profile Stunt.

Right: Antonio Cardoso signals the judges for engine start prior to his flight in Expert Profile Stunt.





Whitely third, and Dan Banjock fourth with his old-racer-looking Vista.

The weather hasn't been too cruel for this fly-in, over the years. The turbulence from the surrounding trees can be pretty challenging on some of the circles when the wind picks up. Thunderstorms usually pass by relatively quickly and then flying can resume. This year there were continuous thunderstorms on the last day that forced the second round of the PAMPA class flights to be cancelled. Also, the many entries meant that only the top half on the first round could fly a second round, for some of the classes.

With digital cameras and no-cost shooting, I always end up with many hundreds of pictures to sort through when I return home. Following are some that haven't been published elsewhere, which I hope will give some additional people the recognition they deserve. (What goes around comes around. Bob Hunt, our new *SN* editor and the CD of the first four Brodak Fly-Ins, encouraged me to submit some action photos to *Flying Models* from that first event, and I've been taking pictures and writing contest reports for *Flying Models* ever since.) *SN*



Dick Carville flew this P-51 Mustang in Expert Classic Stunt.

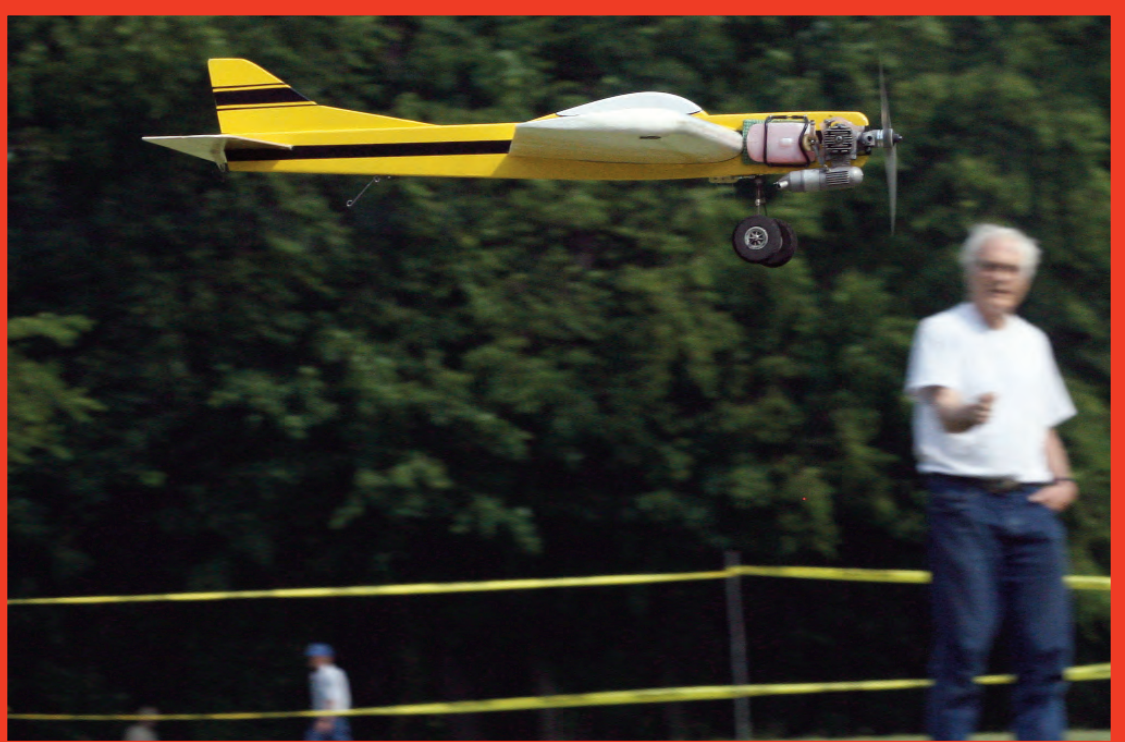
Right: Windy Urtnowski won the coveted PAMPA Expert Stunt crown flying his gorgeous Spitfire.

Below: Here are just a few of the Brazilian contingent's planes.





Left: Jim Damerell flew his Pizza Wagon to a sixth-place finish in Expert Profile Stunt.



Right: Phil Cartier, although a Combat specialist, flew his Streak III in Expert Profile Stunt.

Below: Roy Trantham gives Bob Whitely a "push" on his way to another outstanding flight with his Hawker Hunter.





Above, left: Archie Adamisin launches his son, Arch's electric-powered Oriental. The model features the Brodak electric motor package.

Above: Mike Palko placed sixth in PAMPA Expert stunt flying his Bob Hunt-designed Mustang. The stunning model is electric powered.



Above: Scott Richlen starts a flight with his original design Silver Lancer. The judges in the background await Scott's presentation.

Right: Here's Dick Carville's P-51 Mustang caught in perfect inverted flight. Note the concentration on Dick's face!





Dan Banjock returned with his reincarnated Vista original.



Thomas Case flies his Super Tucano in PAMPA Expert Stunt.



Left, below: the Super Tucano is very popular in Brazil! Here Marcos Eduardo Alleoni de Oliveira puts his through its paces.





Above: Archie Adamisin really likes electric power! Here he flies his electric-powered Oriental one more time.

Above, right: That's Mike Palko's electric Super Clown flying in OTS Expert.

Right: Dave Heinzman flew this Skylark II in Expert Classic Stunt.

Below: Juan Heriberto Kempen flew his version of Bene Rodrigues' Super Tucano at the Brodak Fly-In.



Robin's View Productions' CUSTOM FOAM WING SERVICES



Bob Hunt's Crossfire featured a foam wing with integral foam flaps and a foam stabilizer and elevator. It also featured wing-mounted landing gear installed using Bob's innovative foam wing landing gear system.

Bob Hunt has been supplying the Control Line Stunt community with World Class, foam-based model airplane components since 1969. Stunt models built with foam components produced in his shop have won more World and National Championships than all others combined!

The vast majority of CL foam component innovations are traceable to his shop. He was the first to use triple-section coring for reduced weight, and the first to offer foam flaps that are cut as an integral part of the wing core and then separated from the wing after covering, ensuring a perfect fit between the flap and the wing.

Bob developed the system of using Lite-Ply landing gear ribs that install between the leading edge and the spar, and accept lightweight, load-dispersing landing gear plates instead of the heavier maple blocks. More recently, he has developed a system of accurately cutting fully rounded foam leading edges on the cores that he produces, along with a foolproof method for attaching molded balsa leading edge caps on the cores. This system yields extremely accurate wings that are lighter and easier to construct.

These innovations and many, many more were born from constant research and development in the competition arena. Bob was the first to win a World Championship Gold Medal flying a CL Stunt model fitted with a foam-core wing. Foam wing cores and wings built by him have enabled

hundreds of CL Stunt enthusiasts to realize superior model performance and have helped them to win consistently in aerobatic competition.

When you are preparing to build that next "World Beater" stunt model, remember that Bob has been producing wings for just such models for 40 years! He's serious about light, accurate, and innovative stunt model components. If you want to win, you should be too!

Robin's View Productions offers custom-cut foam wing cores, covered foam wings that are ready for control system installation and joining, and also fully built wings complete with flaps, tips, adjustable leadout guide, tip weight box, and control system installed. RVP has templates for all the popular CL Stunt and Classic Stunt models, and can custom template and produce your original design wing for you. Bob personally cuts each wing core using only top-quality virgin bead foam. Covered wings are produced using only the finest, hand-selected, contest-grade balsa.

For a complete listing of the myriad products and services offered by Robin's View Productions, please send a large SASE to: Robin's View Productions, PO Box 68, Stockertown PA 18083, call (610) 746-0106, or e-mail Bob at robinhunt@rcn.com. Phone orders are welcome and RVP accepts Visa and MasterCard for your convenience. Along with all RVP products comes the invitation to call with any questions about model building. RVP offers an evening "Hot Line" for questions you might have while you are building in your shop.



Here's Bob with his original-design, three-time Nats Classic Champion and two-time USC-winning Caprice. It features a foam core wing with triple internal coring. The original, built in 1967, also utilized a foam core wing.

Remember our motto:
RELENTLESS INNOVATION!

We Have the Technology

By Noel Drindak

A recent thread on the Stuka Stunt Forum addressed solid leadouts. A number of questions were raised that I wanted to answer—I've always used solid leadouts, and I think I have a good system. I decided to share my thoughts in this column and show how I do leadouts.

Solid Leadouts versus Cable Leadouts

Of course there are two different types of leadouts. I'm not going to say that one is better than the other. They both have advantages and disadvantages. I will discuss both types of leadouts, but you'll have to make your own decision on which to use. Personally, I prefer solid leadouts, but I'm probably in the minority.

Cable Leadouts

- All mechanical cables are fabricated from individual wires that are helically twisted into a strand. Cable is specified as the number of strands in the cable by (x) the number of wires in each strand. Aircraft grade cables are most typically 1 x 7, 1 x 19, 7 x 7, or 7 x 19. Flexibility increases with the number of wires—1 x 7 is the least flexible, 7 x 19 is the most flexible.
- The cable most commonly used for leadouts in Precision Aerobatics models is 1 x 7 0.027-inch cable, usually Type 302 stainless steel. The breaking strength of this cable is about 90 pounds.
- The major advantage of cable leadouts is their flexibility—there's no need to worry about the leadouts getting bent at the wing tip (definitely not the case for solid leadouts).
- One problem with cable leadouts is their abrasiveness. I've seen a plane lost after a cable leadout completely sawed its way through a Delrin bellcrank. The most common way of dealing with this problem is to run the cable through a C-shaped piece of copper tubing where it passes through the bellcrank.
- The major problem with cable leadouts is making the loops at the ends. One method of doing this is to wrap the termination with soft copper wire. Many modelers use this method successfully. However, the strength of the termination is highly dependent on the technique, skill, and experience of the person making it. In addition, doing the wrapping is a time-consuming process.
- Another method of terminating cable leadouts is by crimping a loop sleeve onto the cable. This is the way that cables are terminated in the aircraft industry. Our largest airplane, the C-5A Galaxy, uses control cables terminated with loop sleeves. Terminations made with standard loop sleeves generate the full breaking strength of the cable. They work well and they're easy to make. The key is to use the correct loop sleeve for the cable being terminated, and to crimp it with the correct crimp tool.

- Crimp terminations have a bad reputation in the Stunt community. This is because almost no one has the correct loop sleeves and the correct tool for that sleeve. People make sleeves from whatever material they can find or they use something like an electrical splice. Their tools are just as varied including electrical crimpers and all manner of pliers.
- Although I don't use crimped leadout cables, I do crimp my control lines, so I have a lot of experience crimping loop sleeves. Loop sleeves and crimp tools are readily available (although the tools aren't cheap). If you want to learn more go to www.savacable.com.

Solid Leadouts

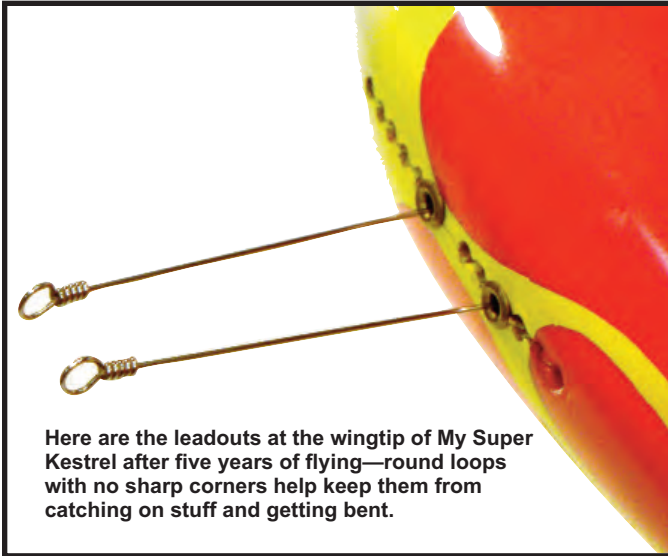
- Solid leadouts are made from music wire. Music wire is a high grade, uniform steel wire originally intended for strings in musical instruments. It is widely used in the manufacture of spiral springs and mandrels. Spring wire has excellent fatigue properties and is extremely strong. It is made in accordance with ASTM A228. The strength of music wire varies with the thickness of the wire.
- The minimum strength of 0.004-inch music wire is 439 ksi (a ksi is 1,000 pounds/square inch). For 0.250-inch music wire the strength is 230 ksi. The size we use for solid leadouts is 0.032 inch and its strength is 327 ksi. When we multiply the strength for our wire (in ksi) by the area (in square inches) we find that each leadout will withstand a pull of 263 pounds. That's about three times as strong as the 0.027-inch cable leadout. Some would say that this extra strength is overkill. I like what my friend Bill Hummel says: "Never undersell overkill."
- The major advantage of solid leadouts is their strength.
- The major disadvantage of solid leadouts is their lack of flexibility. I'm sure that most of us have accidentally bent a solid leadout at the wingtip of a model. If you have, you know that it's next to impossible to straighten the leadout completely.
- Always, when making solid leadouts, avoid sharp bends. Sharp bends deform the wire, cause a decrease in strength, and become failure points. A good way to avoid sharp bends is to use round nose pliers. Also avoid designs with bends that get flexed repeatedly (like an acute triangle at the bellcrank).

It's your choice.

Solid leadouts and cable leadouts—both have advantages and both have disadvantages. I'm not trying to sell either type—it's your decision. However, I started out to show how I do solid leadouts, and I'm going to do that now.

Making Solid Leadouts

The loops for the control lines—I've been doing loops the same way for many years. I make small circular loops at the ends of the leadouts. They're neat and unobtrusive—just large enough for a line clip. The photo shows the leadouts on my Super Kestrel.

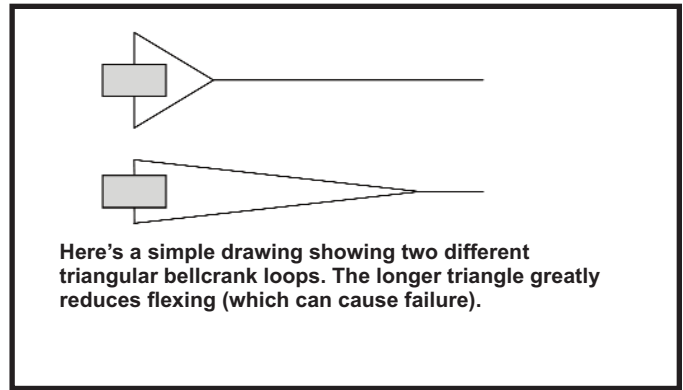


Here are the leadouts at the wingtip of My Super Kestrel after five years of flying—round loops with no sharp corners help keep them from catching on stuff and getting bent.

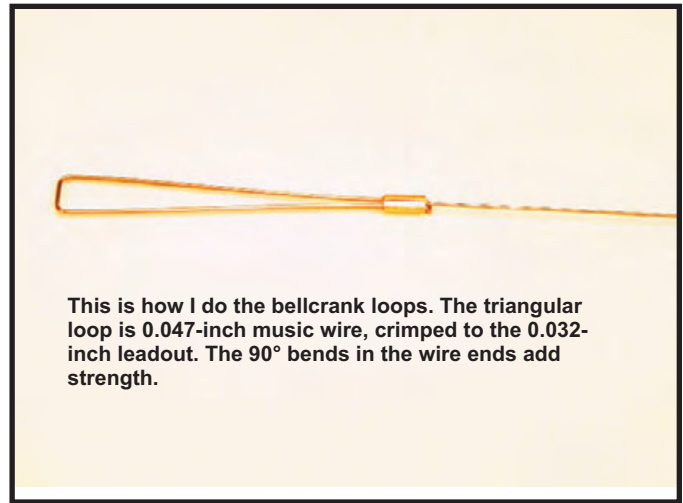
I use a Kwik Twist tool from Du-Bro Products to make the loops on my leadouts. It's specially designed to make loops on 0.032-inch music wire. The directions that come with the tool are pretty good, so I'm not going to give detailed instructions. I'll just mention two places where I deviate from their directions.

1. I find their loop size a little small for my line connectors, so I make the initial bend around an appropriately sized rod.
2. Instead of breaking off the extra wire I use a Dremel cutoff wheel.

The loops at the bellcrank—I make loops at the bellcrank that are triangular. The corners of the triangle are a concern



Here's a simple drawing showing two different triangular bellcrank loops. The longer triangle greatly reduces flexing (which can cause failure).



This is how I do the bellcrank loops. The triangular loop is 0.047-inch music wire, crimped to the 0.032-inch leadout. The 90° bends in the wire ends add strength.

because they flex when a pull is exerted. Years ago, Windy Urtnowski pointed out to me that longer triangles flex less. In accordance with his suggestion, I make the loops 3 inches long. Adding a bit of overkill (never undersell overkill), I make the loops of 0.047-inch music wire, attaching them to the 0.032-inch leadout with a crimp splice. Another reason for separate loops is that with a 62-inch wingspan, you don't have enough wire in a 36-inch length to make 3-inch triangular loops.

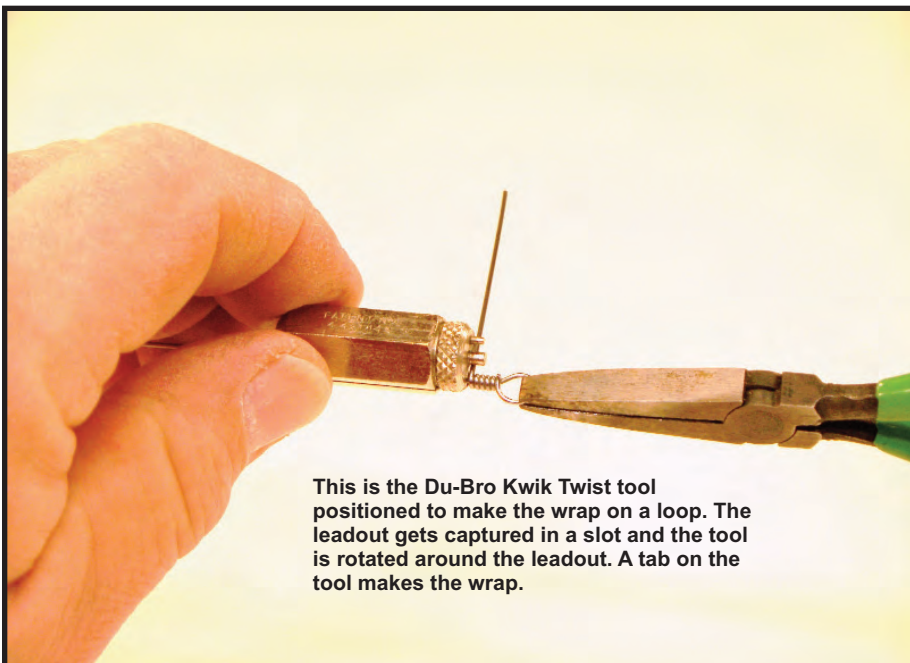
One more thing about my leadouts—I do all the bending before putting the leadouts in the plane. I do it this way because it's easier to make the bends with the leadouts on the bench. Also, if I mess something up I can do it over until it's right. I make a line guide with a 1/4-inch hole at one end. After installing the bellcrank and leadouts, the wingtip and line guide go over the leadouts. It's easy to fill the 1/4-inch hole afterwards.

Regardless of what your leadout choice is, I hope I've given you some information you can use.

Good luck with your next plane. *SN*

Sources:

Carl Stahl Sava Industries, Inc.
4 North Corporate Dr., PO Box 30
Riverdale NJ 07457
(973) 835-0882
www.savacable.com



This is the Du-Bro Kwik Twist tool positioned to make the wrap on a loop. The leadout gets captured in a slot and the tool is rotated around the leadout. A tab on the tool makes the wrap.

Why I Fly Stunt

I was always infatuated with airplanes, so much so that as a young boy I would build loose-leaf paper gliders. I was intrigued with how they stayed in the air and how, with minor adjustments and modifications, I could have them do wide turns and loops. In one of our local stationary stores, I discovered small balsa models, some selling for 25¢ to .65¢ each. There were also models in a line called Speedy-Built, made by Guillow's. Do those names bring back memories?

Naturally, I wanted to buy and build all of them, but money was a problem. Simply put, I did not have any. Finally I found a part-time job at a local pharmacy and by saving my money, along with the 15¢ daily allowance my dressmaker mother would give me, I managed to buy and build all the models that I had been admiring.

The last model was a Lou Andrew's Trixter Pixy sold by Paul K. Guillow. It made me salivate. It was a 26-inch wingspan, gas-powered, free flight glider that was priced at \$1.75. Needless to say, it presented a financial problem. Nevertheless, I was determined to have it, and after a while I

managed to accumulate enough money to buy it along with the Duco cement to assemble it. I now had a Guillow's Trixter to call my own.

Everyone knew how happy I was when the Pixy was finally mine. I remember one of my grammar school teachers telling me, "I see that all you think of and dream of is model airplanes." She was right.

As a child, I lived on the east side of Manhattan (East 48th Street), and during the summer months my parents would pack everything that we needed for a family picnic. Since we did not own a car, we would take the subway and head for the country, which for us was Pelham Bay Park in the Bronx. As strange as it may sound to some of you out there, yes, Pelham Bay Park in the Bronx was the country.

Not only did we pack everything needed for our family picnic, but arrangements had to be made to take Lucky. Lucky was our family pet—a black Manchester terrier—and he was quite a dog. However, to get him on the subway we needed a dog carrier. Not having extra money for a dog

Featuring Rich Giacobone



Rich Giacobone (R) and Robert Brookins at last summer's Nats in Muncie, Indiana. Gene Martine photo.

carrier, my father took an old suitcase, cut slots in it, and converted the suitcase to a dog carrier. We would walk to the subway station with all of our bundles and Lucky on a leash.

At the entrance to the subway we struggled to convince Lucky to get into the suitcase/dog carrier. Although the suitcase was large enough, Lucky always objected to getting in. Eventually he would give up, but to this day I somehow find it hard to believe that he was so unwilling to cooperate. After all it was a chance for a city dog to go to the country and enjoy the outdoors—a day of swimming in Pelham Bay, chasing birds and squirrels, and finally a picnic.

It was late in the afternoon on one of these great summer picnic outings that would unknowingly bring me face-to-face with control line flying. We decided to take a different path back to the subway station and that is when I saw my first control line model airplane fly. I had no idea that we had stumbled on the famous Pelham Bay flying site. I was mesmerized by those beautiful models. It was indeed love at first sight. I was unable to take my eyes off those airplanes. I loved everything about them: the colors, the sound of the engines, the color of the exhaust, and the ability of the pilots to maneuver them. Needless to say, my poor parents and Lucky had to drag me away.

That night I was unable to think or focus on anything else. The images of those models were now pressed between the pages of my mind. I could not wait for the weekend so that we could enjoy our family picnic and see those phenomenal airplanes again. After several return visits to the flying field, I was able to learn more about the planes, the technology and the people involved. I was determined to get involved. What

an experience!

Back then, unlike today, not all information was readily available. Even if an experienced flier had the necessary know-how; he would usually be reluctant to pass it on to a newcomer. As a result I found things to be both challenging and frustrating. I was not going to have these difficulties force me to give up what I had discovered.

With the little information given to me by the guys at the Pelham Bay Park flying field, I learned about Polk's, Jack's, and Ben's hobby shops. It was at Jack's Hobby Shop that I purchased my first control line model: a Wee Willie with an O.K.Cub 049 engine. Building this model proved to be very difficult for a young boy. Fortunately my father had a great deal of patience and walked me through every step. He taught me how a bellcrank, push rod and control horn worked and how the model needed to be assembled.

Finally the model was completed, but, not having my father's patience, one day after school, I decided to connect the alligator clips to a dry cell battery, fill the fuel tank with Testor's 39 (do you remember Testor's 39?), connect the alligator clips to the glow, and start the engine. After a great deal of time flipping the prop and getting my index finger clipped and bloody, to my surprise the engine started.

Now I had three surprises: first, the engine was running, second, our apartment was quickly filling with smoke, and third, my father came home early from work. His stare said it all. He told me to stop the infernal engine, but I did not know how. His calm prevailed as he grabbed a towel and threw it on the prop. It was winter and all the windows in the apartment were closed. As you might imagine, the fumes



Rich Giacobone (R) signals to start a Nationals flight while Buddy Wieder holds. Martine photo

were incredible. I could not believe that a little 049 could produce so much smoke. My father forgave me for having started the engine in the house, and he became a great help with my building and flying problems. I never started an engine indoors again.

Finally, winter was over. It was early March and I could not wait to return to Pelham Bay Park and have the opportunity to fly my Wee Willey. I remember how frustrated I was, making attempt after attempt to fly the plane. My father kept telling me to be patient and to stay calm. Watching from a distance and sensing my frustration, one of the “big guys” came over and suggested that I consider building a Sterling profile model such as a Yak-9, a Ringmaster, or a Mustang. He told me that a bigger plane with more power would be easier to control and fly. That was how I was introduced to my first Sterling Profile Yak-9.

My father and I went back to Jack’s Hobby Shop and bought the Yak-9. Since I did not have enough money for a Fox .35, he helped me buy a K&B 32 Green Head. We assembled the plane and I could not wait for the weekend to fly it. Not knowing anything at all about flying or about preparing myself properly for the maiden flight, I struggled to start the engine, ran out to the hot rock handle, and gave the launch signal. The plane went up, made a huge loop and came crashing down. Can you imagine my disappointment?

It was only after several similar experiences that I learned that one line was longer than the other and I did not have neutral on the elevator when the handle was held at neutral position.

their cruisers would head our way over the snow-covered great lawn, and we would be told to take our planes and told to “get lost.” When we would see them coming, we would quickly start the engines just to squeeze in an extra flight. This happened so often that we got to know the policemen, and in true city-kid fashion, finally got the nerve to ask when they would not be working so we could fly. We did not get the reaction we had hoped for ...

Sometimes Gene, Pat, and I would fly on a paved, fenced-in soft ball field located on First Avenue and 40th Street, adjacent to the United Nations Plaza. One day while we were flying our planes and running our Fox 35s without mufflers between skyscrapers, creating a devilish noise, a group of well-dressed men approached and asked what we were doing and what the noise was about.

We spoke to them at length describing our interest and our planes. They watched us fly, shook our hands, and left. As soon as they were gone another well dressed man came over and asked what the original group had wanted and what they had said. We told him how curious they had been about our planes and how they were controlled. He then asked if we knew that we had been speaking to Dag Hammarskjold, the Secretary General of the UN and his entourage.

Going to the Pelham Bay field was always the highlight of the week. I would meet Frank McMillan and his dad at the subway station as well as Pat Frangella and Gene Martine. I remember how Frank’s father, Ed, would sit on my flight box, and to this day, on occasion, I can still see him sitting there. It is hard to imagine in today’s world, but Gene and I would head

These are some of my special memories and experiences and are my reasons for still flying stunt.

After several months at the flying site, I finally met four guys with whom I am still in touch: Frank McMillan, Gene Martine, Pat Frangella, and Ken “Sleepy” Dawson. Ultimately I met the illustrious Tommy Deville and, as you might imagine, nothing was dull when Tommy was around.

I continued to struggle, but never gave up, and after more crashes, repairs, and planes than I care to remember, I learned to keep the plane in the air for a full flight. What a euphoric feeling that was!

After becoming reasonably able to take off and land without crashing, I decided to learn to fly stunt. This was not an easy decision to make. As everyone reading this knows, flying precision aerobatics requires a great deal of dedication, perseverance, mental concentration, and determination. Learning the complete stunt pattern is not an easy task. It was certainly not an easy task for me and in fact, after many years of practicing the pattern, admittedly I am still in the learning process.

I marveled as I watched the seasoned fliers such as George Aldrich, Red Reinhardt, Lt. Leroy Ducharme and others fly through the precision maneuvers. With each flight that they completed, I became more inspired and more determined to become a successful stunt flier even though I knew that this commitment would mean more crashes and more set backs.

From a kid’s perspective, I had so much fun and so many exciting times flying stunt. During the winter months Gene Martine, Pat Frangella, Leo” Loop” Lewis (he was called Loop because it was the only maneuver he could do), and I would head over to Central Park to fly on the great lawn. At first the New York City Police were reluctant to chase us, but inevitably

to Grand Central Station, planes and flight boxes in hand, to take the train to the New Jersey meets some as far away as Far Hills, Springfield, and Perth Amboy. Eventually, the father of one of Frank McMillan’s flying friends bought a car—a neat, 1951 six-cylinder, standard-shift Ford—and our flying world expanded when he volunteered to take us to the different meets. Now we could travel to Long Island, Connecticut, Pennsylvania, and Maryland to fly.

One of our more memorable meets was the Daily Mirror Meet with hundreds of entrants participating and thousands of spectators on hand. It was indeed a happening.

Gene and I once convinced his father to drive us to the Atlantic City meet, in December! The meet was held indoors at the Atlantic City Convention Center—the same site as the Miss America beauty pageant. It was here that I first met Bob Gost, AKA “U-Reely” Bob (so named because he always flew using a Jim Walker U-Reely handle). Bob flew well that day, but was unable to beat Frank who placed first. Bob placed second, and yours truly, through all the controlled chaos, managed to place third.

These are some of my special memories and experiences and are my reasons for still flying stunt. I have found that stunt flying has continued to challenge me. It has allowed me to become closer to the stunt family and has allowed me to renew old friendships and find new ones. It does not matter how near or far we are from each other, because the camaraderie binds us to something that we all enjoy. The stunt family has become *my* family and I can honestly say I am happy and proud to be a part of it.

Enough for now. Fair winds. *SN*

Beginnings

By Doug Dahlke

Readers input: Gerry Boyd, Vancouver, B.C. Canada, continues down his path of full-flapped, compact, semi-scale Stunters with this sharp looking, TD.051 powered, sort-of P-51. You see more of these smaller Stunters these days. Slick!



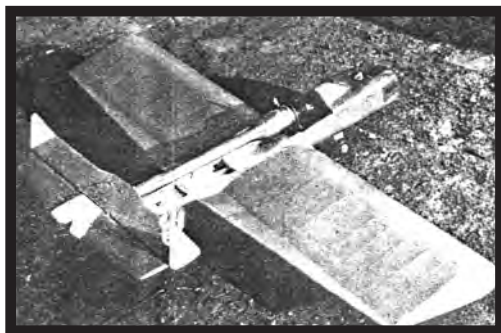
Here's Gerry Boyd again with yet another of his neat, compact, semi-scale Stunters. What's the weight on this, Gerry?



KidVenture '08: The same good fun as always. Bring your pet flyer and visit us in '09. Isn't that supposed to be the year you come? See you there.

Jet Stunt—Part III: Here's the earliest jet Stunter I've found so far, with full flaps no less! It was flown by James Becraft, age 14, of St. Paul, Minnesota in 1952. When compared to other jobbies in this column, this sucker's big! It spans 5 feet with a 1-foot chord, yielding 720 square inches of area! Geez Louise! That's 100 squares more than a Super Duper Zilch, sonny!

Jim's Dyna Jet sipped its fuel from a dainty, 3/4-pint gas tank. You know how your ears ring after even a 30 second jet run? Try to imagine being in the circle listening to one during a five-minute run for the OT pattern! Clearly, not for those who are fearful of loud noises ...



With this 5 1/2-pound rig at full bellow, expect your cochlea to be bouncing around inside your ear canal, like a cork in a tumble washer.

One rumor has it that Jim became interested in

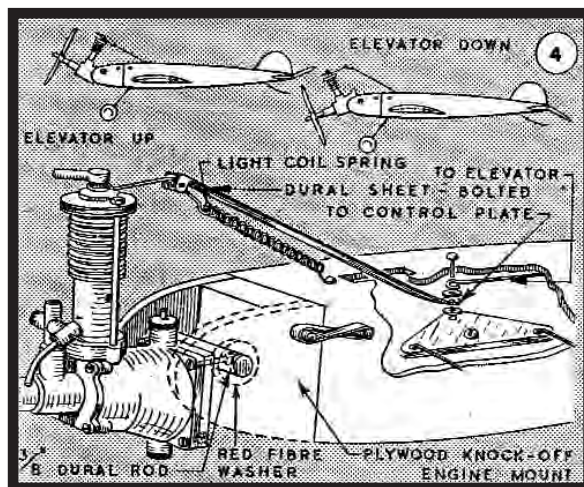
jet Stunt when, while in St. Paul, he heard one running in South Dakota, which has already been covered in this column. One highly practical, recent suggestion is to have one of these jets on a test stand in the back seat of your car with the rear window open. Then, when some airhead cranks up the bass on his radio, you crank up the Dyna Jet! Show him what the word loud really means!

Stunt designers who see things differently: It's always a hoot to review earlier ideas intended to reduce turning radius, so, here's another. Trendies will want to use the term "vectored thrust" here.

Major F. Brian Thomas was an early UK pioneer of CL Stunt. Here's one of his ideas some might call "mind candy." The original intent was to help a small model to become more responsive to control with a small engine—without increasing the elevator area. (It's unclear why increasing elevator area would be such a horrible thing.) Major Thomas says he has found it gives definite improvement in response.

The engine bolts to a 3/8-inch-diameter Dural rod, held in the plywood knock-off engine mount, the rod being bushed by a fiber washer glued to each side of the plywood mount. The light coil spring is intended to support the weight of the engine when the model is not flying. When the engine is held with the left hand and started with the right, it is found when running that the engine remains horizontal from thrust and hardly needs this spring at all. At the top of a loop, the weight of the engine itself tends to flop it into the up-thrust position, which smacks the model smartly over the top—something many modelers will appreciate after watching their models waver unsteadily at this point. (Have to wonder if that was the result of a lack of poop.) By this virtue, it should be possible to Stunt models with smaller engines than would normally be needed.

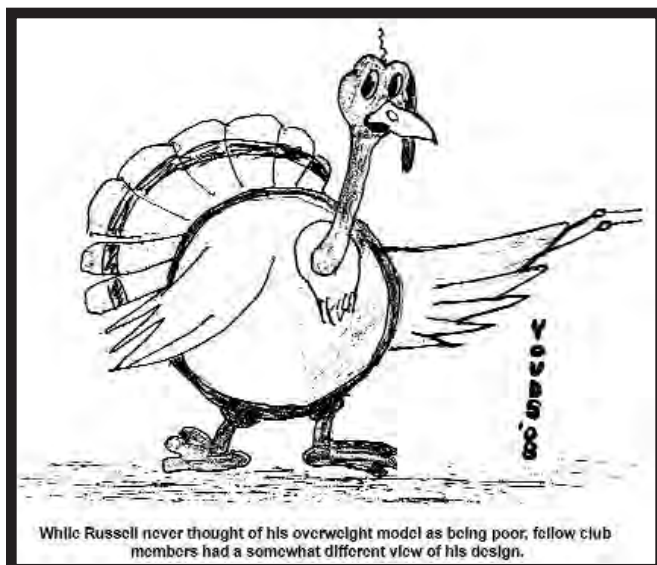
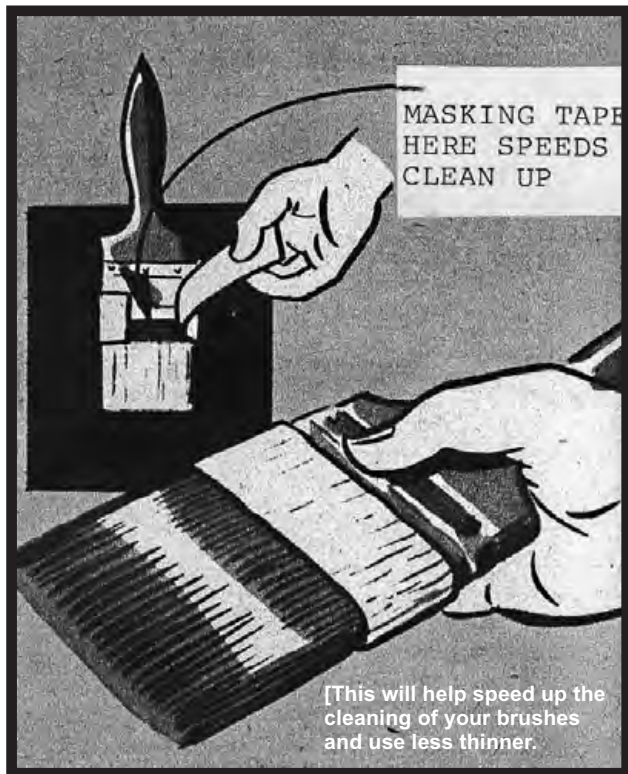
Right Major, but, "Why?" I'll also bet that the referred to "flop over" doesn't do a lot for really round loops. As we know, unfortunately, labeling is everything today, so allow me to offer a new label: "Gravitationally Vectored Thrust." Would this jobbie approach the hallowed 5-foot radius corner? Oh yes, the good Major has built and flown this design and claims a definite improvement in response. (Right, but compared to



Setups like this just leave me speechless. Should you build one, it's unlikely to be mistaken for anything else on the flight line.

what?) Who's bold enough to try this? For real thrills, try it with .65 power! Why not share this maneuvering aid with a Combat flier?

Another building tip: Cleaning up your brushes after use is always an ache in the rear. Some help is at hand with common masking tape. Simply wrap it around the brush ferrule and top edge of the bristles as shown. When you're done painting, remove the tape and cleaning goes much quicker.



**Fiction 'n Fact
from Doug's Almanac**

*Experienced stunt fliers
seldom wish to be younger.
(d.d)*

If you like our Kits you will LOVE our Fuel Tanks

- Made from 75# bright tinplated .009 steel coated on both sides to stop rust
- Annealed Copper Tubing used to resist cracking from engine vibration
- Every tank is cleaned inside and out before delivery
- Fully pressure tested before delivery
- Fuel Capacity from 2 oz up to 7 oz

*Built for Flyers
by Flyers*

Stub Nose



Chicken Hopper



Upright Engine



Profile Mount



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Simple landing gear layouts: Every once in awhile, it's important to review some of the basic layouts for things like landing gears and other ideas because: 1. New members are reading these lines, 2. Seldom used ideas tend to be forgotten or get foggy, and 3. New materials may help improve the way older layouts work or are completed. We'll focus only on music wire setups here, but keep in mind that, many times, an additional, thin wire brace connecting the individual legs are both helpful and common. For CL, these wires sizes are the most common:

- 5-10 ounces— $1/16$ inch diameter
- 10-20 ounces— $5/64$ inch diameter
- 20-40 ounces— $3/32$ inch diameter
- 45-65 ounces— $1/8$ inch diameter

Sketch #1: Most common, cheapest, easiest and lightest, due to least wire used. Bind gear to firewall with about 10 wraparounds of thread or .004 to .006 of clean, copper wire and epoxy in place. A better idea is to reverse this, putting the gear wire between the two firewalls as shown. Optional is gauze, nylon or carbon fiber reinforcing over all as shown also.

Sketch #2: This setup is stronger, with the firewall locked in by the beam mounts. The Zilch family of Stunters used this setup in their larger models.

Sketch #3: Substituting "J" bolts for thread or fine copper wire binding offers no useful increase in strength. The "J" bolts do offer an unwelcome increase in weight. If you ever do use "J" bolts, at the least, trim off any part of the threaded bolt that extends past the nut. They offer next to nothing; I've sold all my "J" bolts.

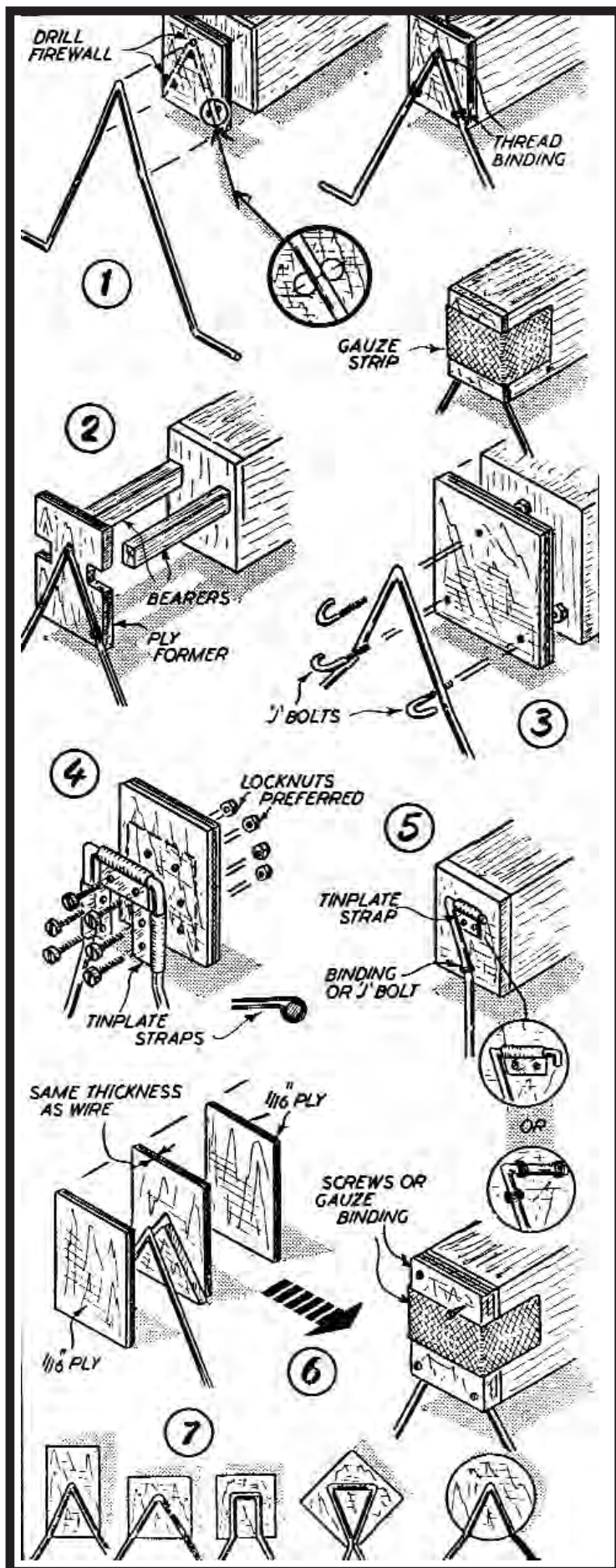
Sketch #4: Although suggested "for large models only," it's just too heavy for what we build. It's probably great for RPVs, UAVs and Predator drones, but not for normal Stunters.

Sketch #5: Not as bad as #4 above, but still the same complaints as #4, above. Once you pass the strength of collapsing ply in a crash—Why build it stronger still? What's the point? In a crash, the gear is normally being bent backwards, so why a "J" bolt? The binding method shown is the way to go.

Sketch #6: One problem here is that if you make the inner wood exactly as thick as the wire, the inside piece becomes two pieces and strength is totally dependent on the glue. Some prefer to lightly notch or dent the second firewall, keeping the center firewall in one piece. A second issue is that, rather than just one, single strip across the front, some builders apply their gauze reinforcement completely around the entire firewall/fuselage junction.

Sketch #7: Although intended to show different fuselage shapes, each of these could be cut as a firewall shape and glued to a profile body.

Please send column submissions to: 1393 E. Black Wolf Avenue, Oshkosh, Wis. 54902. SN



Just match up the text sketch number with the drawings.

Personalities

By Louis Rankin

Featuring Dan Banjock, Secane, Pennsylvania



Grinning Dan. (Allen Brickhaus photo.)



The majority of CL fliers I know can be lumped into either sport fliers or competition Stunt fliers. Sport fliers love CL and building but do not have a burning desire to compete and do not spend their flying time honing their pattern skills. Competition Stunt fliers usually concentrate all their building and flying to

famous pulse jet MiG-15. I forget which day that week, but the rumor was spread that Dan was going to crank up his MiG at dusk and give us all a fire belching display of old time nostalgic pulse jet entertainment.

After competing all day most of us met at our favorite eating joints and began to discuss the events of the day. I mentioned to those at my table that Dan was supposed to give a jet demo, that I was going, and did anyone want to join me. Everyone at the table agreed that would be a great idea and we all dragged our tired carcasses back out to the L pad to see if the rumor was true.

Sure enough Dan was there with his MiG-15 and a crowd was starting to gather. There was still about 40 minutes of daylight left and Dan explained that he was going to wait until it got almost dark so that the fire display would be more spectacular. Some of us set up our chairs and some of us just sat on the grass and waited for the show. Then a wonderful thing happened. In the quiet calm of the early evening just as the sun was setting the young kids that were around got out their hand-launched gliders and rubber-powered models. Young Mr. Paris and young Mr. Moon were gleefully tossing and chasing their models. My good buddy Kenny Stevens and I sat there and watched with a youthful longing and wished that kids everywhere could experience the simple pleasure of tossing balsa gliders and

perfect their skills and increase their chances at winning in the circle. Dan is one of those rare modelers who combine sport and competition CL aeromodeling very successfully.

I knew of Dan and his eccentric modeling but had never been privileged to really get to know him until we had the chance to meet at the 2008 Nats.

Dan was competing in Expert Stunt but true to his sport flying interest he also brought his



Dan's fire-belching MiG-15. (Brickhaus photo.)



Young Dan and a young Robby Hunt (circa 1990). (Photographer Bob Hunt.)

rubber-powered models into the air.

The excitement and the crowd kept growing. As it started to get dark several started chanting “Banjock, Banjock” and then finally we heard the very loud and distinctive sound of the pulse jet cranking up. Man, the sound alone will make goose bumps come up all over your body. Then suddenly the jet was off and speeding around the circle much faster than I would ever want to spin. The whole event was awesome and spectacular!

Dan lives in Secane PA and works as an aircraft mechanic. He has no wife or kids. That is probably the reason he can indulge large amounts of time into the aeromodeling hobby. I know it is the main reason I stay single. He has been aeromodeling for 32 years and gives Scott Chaney the credit for his start and inspiration. CL sport and Stunt is his main interest and he also dabbles in free flight. His favorite designs are the Stiletto 660, Gieseke Nobler, Bob Hunt’s P-51, Vista-39, and the Bi-Slob. His least favorite is the Sig Banshee. As with many that I interview, he could not narrow his favorite power plant down to one engine. The PA .61, ST .60, ST .46, LA .46, FP .40 and Fox .35 are his favorite power plants. His least favorite is the McCoy Redhead.

Dan is a member of the Philly Fliers and admits that meeting everyone in the club is the most memorable of his moments in aeromodeling. He tries to get out and fly with them every weekend that he can.

His current building projects are the Galloping Comedian and a double-scale 60-inch-span Bi-Slob that he and Ted Heinritz are building. He plans to power it with an O.S. 1.08. I might add that Dan is famous for his double-scale 84-inch-span Flite Streak. I have never had the opportunity to see the Super Flite Streak in flight; however, I hear it is awesome. Several years ago I heard about Dan’s Super Flite Streak and had some foam wing cores cut to build one for myself. I have yet to get to that project. In any case, Dan says the Super Flite Streak is capable of performing the pattern and will pull you off your feet when doing the wingover. It is also powered by an O.S. 1.08.

Dan loves to give demos and frequently flies at Community Days, 4-H, and Boy Scout events. He always carries a trainer with him just in case he sparks some interest. I highly

recommend everyone to have at least one trainer in your stable. Always take it when you go fly; you never know when someone will be interested.

All the good people and fellowship is what Dan likes the most about aeromodeling. Politics and crashing are what he likes least.

As do most of us, Dan has a great interest in aviation history. He also likes to build some of the old designs from



aeromodeling history. His famous metal planes are a throwback to the 1950s.

Since Dan lives in the Northeast not many of you will have the chance to meet him; however, he is a regular at the annual Brodak event and tries to attend the Nats every year. So, if you make it to either one of these events make sure you stop by and meet Dan and admire his model collection. **SN**



Ted Hienritz and Dan Banjock, builders of the double-scale Super Flite Streak. (Photographer unknown.)



Dan's vintage metal fleet. (Photographer unknown.)

Ask Ken

By Ken Gulliford

Q *uestion: Is there any sort of a cheap ARF model to learn Stunt with?*

Short Answer: That depends upon your definition of cheap. Cheap price? Or, cheap construction? Well, anyway it's yes to both ...

Long Answer: Some people consider any profile cheap, and on that account Top Flite has a Flite Streak ARF that is well under \$100. I've had a few, they fly great, are easy to assemble. (Notice the obvious avoidance of the word "build." I really don't want to have that discussion right now.) However, it can be easily over powered, and does not survive encounters of the earthen kind very well. Brodak has an ARF (and ARC) Super Clown; again well under \$100 and again a great flier. There are several other good candidates, if you look around.

My particular case went in a less traveled direction. Sometimes unusual things happen, and Stunt flying is no different, but it is notably unusual to owe thanks to a monster. Godzilla is the one that helped me perfect the moves and maneuvers that would add up to a complete Stunt pattern including a safe landing. And, Godzilla continues to help fliers

with their confidence and sharpening skills today.

In the mid '90s, when my fancy turned to Stunt, I had never done a "square" maneuver in my life, other than wingovers, and even the angle on those was in question. My best-flying plane at the time was a 3½-ton Ringmaster with my favorite McCoy .35 on it. It weighs nearly 4 tons now, and is only flown for purely nostalgic reasons. However, that Ringmaster was the plane that took me through the beginner Stunt pattern and into intermediate, but it had some help from Godzilla.

Okay, enough teasing. Godzilla is a large Combat plane from Yuvenko & Co. It has some really desirable properties like: it can fly at a very wide speed range, it can maneuver as quickly as you want, and faster than most of us can use effectively, the engine and tank are readily available for adjustment, and most of all, it cost me \$50 delivered ARF.

The construction was really tough (not ...), involving epoxying the fiberglass tailboom in place, bolting on the all-moving stabilizer, and inserting the control rod in the already mounted bellcrank. All that was left was to bolt on an engine and strap on a tank and I was ready to fly. I have seen Combat guys buy these unassembled at the field, assemble them, and fly them, all within around two hours.

I would love to take the credit for the idea of using a large



Godzilla is a large Combat plane from Yuvenka & Co.

Combat model to train for Stunt, but a local flier is the one who gave me the idea to use a Godzilla. Grady Widener, a Phoenix flier and MonoKote expert, has been using a Godzilla fitted with a wheel for years, and he, along with local Combat fliers Jeff Hanauer and Lance Matassa are the ones who pointed me in the direction of using a Godzilla to train with. Their urgings, Grady's flawless flying, and the \$50 price tag are what did it for me. Of course, my Ringmaster's lack of maneuverability added to the decision some as well ...

My choice of engine was an O.S. .40 LA converted from RC to CL with a nylon venturi and an old style O.S. needle valve. The engine run is a fast four-cycle on the cusp of a slow two-cycle. The O.S. doesn't really like to run there very much, and will break into a slow two-cycle



almost as soon as the centrifugal force of flying in a circle kicks in after launch. However, dependability is the LA's strong suit in this application, so the problem of speed setting is much less of an irritation, given the one-flip starts.

What's so great about the Godzilla? Well, most of the planes in this category have an enclosed cavity in the leading edge of the wing to house a bladder-type surgical tubing pressure tank, and Godzilla had a spacious open tank compartment. I used a Stunt type tank, and I think that Grady does as well. Have you ever seen one of these Combat ships bounce after impact? Well, I've been on the handle end of a couple of those, and it's impressive. Now, you have to inspect them real well after an "intercept," but with the see-thru covering it's not too hard to do. Granted, none of mine were straight in, but rather glancing blows.

However, even those glancing blows would have done-in a regular Stunt ship, or even a profile Stunter.

Again, why the Godzilla? Well, it has 600 square inches of wing area, weighs 18 ounces ready to go, and a wing loading that you cannot even get close to with a Stunt ship of the same wing area. So, it corners like, well, like a Combat ship! This aids in ground avoidance while you are trying to discover the bottom of your squares and triangles, not to mention staying glued to the top of the circle in overheads and the hourglass. That sums up to a lot of room for error, and in my case, at least three extra lives from "bouncing."

Let's say I decided to go for ARF Noblers instead, at \$100 each. The engine would stay the same, and so it would cancel out price-wise, along with the price of the tank, given I had one in my pile of treasures to put on the Godzilla. Initial Nobler investment plus three replacements equals \$400, minus the initial investment for the Godzilla puts me \$350 ahead of the game! What's the point? OK, some of us need more practical ground avoidance than others. Some of us need a more maneuverable plane

than a "normal" Stunt plane, to realize our spatial awareness inside the Stunt circle, and some of us don't have unlimited time and funds to either build or buy planes to match our error rate. There are alternatives. If you check with the local Combat guys, there are ARF planes available, at reasonable prices.

Although the Godzilla was manufactured and distributed for right at \$50, the decal was not included, and because of a series of errors on my part (from not doing my homework) cost as much as the plane. They tell me the Godzilla is no longer available, but for the right price they can probably find one or two ...

Inside the pages of *SN* you can find other sources, like a couple of really good offerings from the Corehouse. Outside, you can find some of these larger Combat planes at: <http://pages>

[.prodigy.net/gcleveland_grsmodels/](http://prodigy.net/gcleveland_grsmodels/) or you can contact nearly any Combat club and they might get in-touch for you. If I was going for a "reusable" Stunt Trainer these days, I would probably go for one of the "FAST" (\$50) series, and mount an LA .25 on it with a good Stunt tank. Many times the prices come down when 10 or more planes are purchased at one time. My Godzilla was one of 50 at the time. You may need to do some simple modifications like adding skids or a wheel to help get ground clearance for your muffler, or needle valve. A little forward thinking may save a needle valve, muffler or even a crankcase, and who cares what it looks like? After a little reflection on my part, you might even want to try converting to electric, Hmmm. Cheap, easy, clean, and quiet.

So, what does Godzilla do these days? Well, the 11-year-old warrior is being used for beginner introduction flights, teaching outside maneuvers to fledgling Stunt fliers, and helping build the confidence and good habits required in Stunt patterns for fliers who need just a little more room in the circle.

Sometimes it pays to think outside the box, or at least outside the circle. As a result of researching this article, I found a couple of really nifty Web pages that I would like to share with you.

O.S. Engine Exploded Views at:
www.osengines.com/parts/exploded-views.html

O.S. Engine Specifications at:
www.osengines.com/engines/engine-specs.html

Enjoy and Happy Trails. Ken. SN

The Appearance Point

by Jerry Silver

My Rendition of Bart Klapinski's Tempest

I first met Bart Klapinski shortly after he won the Nats in 1967 with his Tempest. At that time I hadn't yet learned to fly the pattern and needed help. We met at a local flying field in Anaheim, California, and he brought one of his Tempests. Not only was I taken with his model, but was positively thrilled by the way he flew it. I had never witnessed anything like it before! I knew that someday I would have to build one.

I finally got around to it in the early 1990s. I actually had to build a second one after destroying the first. My goal was to duplicate one of the four that he built. I chose to use the color scheme of white with orange trim with black and gold pinstriping. I believe that was his fourth version. He even gave me the instrument panel to use out of his Nats winner. What a guy!

This version features over-and-under adjustable leadouts and sliding canopy. The finish came out pretty well and I was very pleased when it was awarded the Pilots' Choice Concours at VSC VIII in 1996. The old girl still looks pretty good, probably because I haven't flown her in years! *SN*



Jerry Silver's beautiful Tempest is white with orange trim and uses black and gold pinstriping. It features a sliding canopy.



Specifications

Model Name: Tempest
Designer: Bart Klapinski
Construction type: Built-up wing and fuselage, solid stab and rudder
Wingspan: 54 inches
Length: 36 inches
Moment arms:
(measured from the front of the wing to the back of the spinner and from hinge line to hinge line:
8³/₄ inch nose and 14-inch tail
Weight dry: 46 ounces
Power package: McCoy 40, 4-ounce metal tank
Propeller: Tornado 9 x 6 3-blade
Finish: Sig Butyrate dope
Line length: 63 feet center to center

The Stooge Event

by Joe Adamusko

Back in the early 90s, I purchased one of those steel base plate (weighted) spring action tail wheel release stooge mechanisms in order to fly my stunt ship when no one was available to launch the airplane for me.

The spring loaded pivoting tail wheel release mechanism utilized a 1/8-inch-diameter piano wire pin with a quick-link connector press fit onto the end. The quick-link design feature made it easy to connect the eyelet end of a single flying line (.018 stranded) on the stooge to serve as a release pull line.

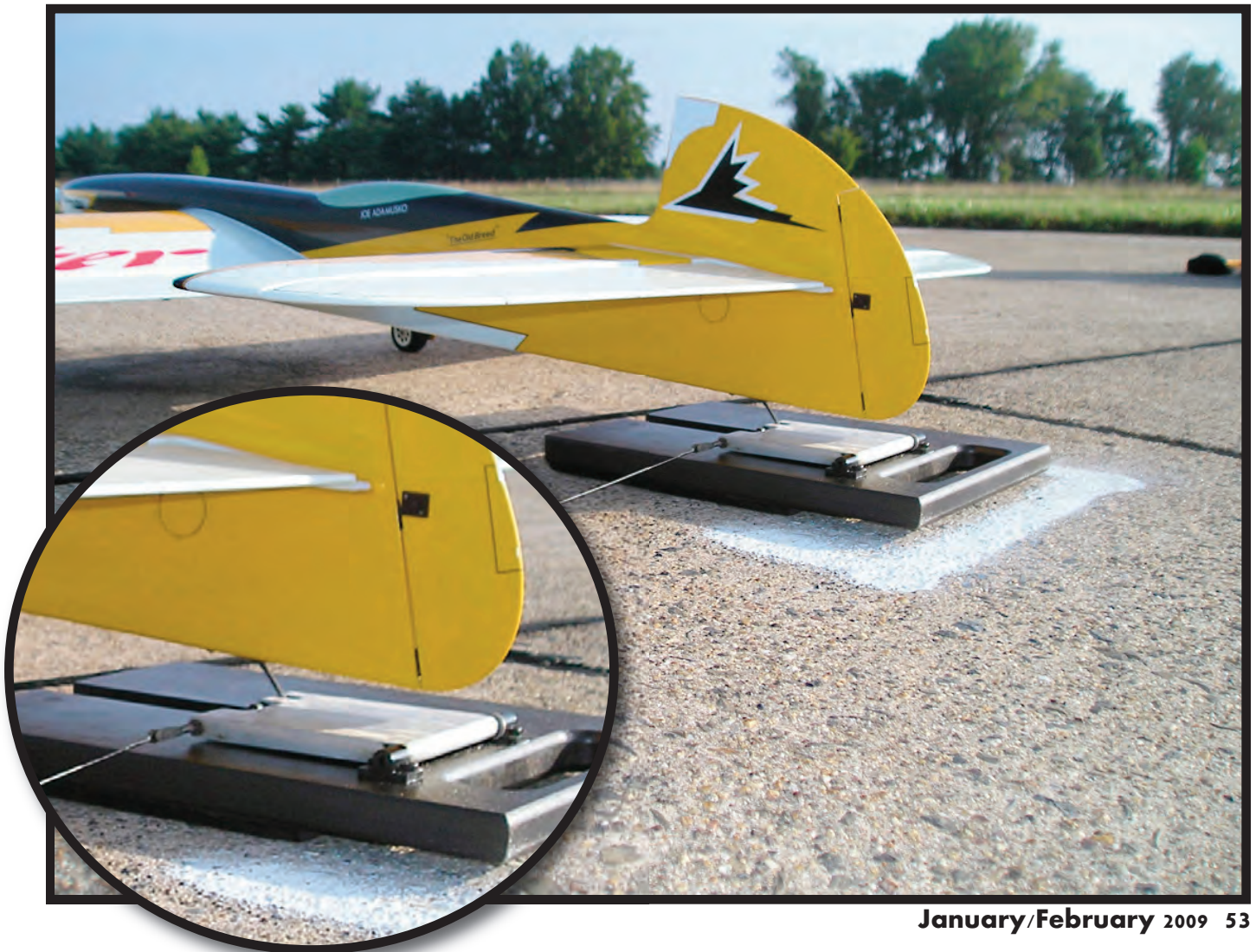
I was all set to test my new stooge set-up at the local hard surface flying site, so I positioned the airplane tail wheel and wire in the pivoting release mechanism, ran the flying lines out and connected them to the airplane, then unreeled the stooge line to a location near the handle. I adjusted the line

release length to within a comfortable arms reach by rewinding the line onto the 4-inch plastic storage reel, and tucked the line into one of the slotted holds in the plastic reel to secure it. This setup allowed me to use my non-flying left hand to grip the reel and use it as a line release handle.

After starting the engine and adjusting the needle valve, I made sure the tail wheel was firmly surrounded in the pivoting release mechanism, and proceeded out to the handle, being sure to walk behind the airplane (safety first you know), just in case the airplane released prematurely for some reason, I would not be in the line of roll out.

I gripped the handle, slipped the safety thong over my wrist, and then reached for the stooge line reel with my other hand, got ready to take a step backward if necessary, and then pulled the line to the stooge release mechanism. The

The airplane released as expected, so I dropped the stooge line reel to the pavement and concentrated on the takeoff roll.



airplane released as expected, so I dropped the stooage line reel to the pavement and concentrated on the takeoff roll.

I suddenly realized that I placed the stooage line over my flying lines before takeoff. As the airplane flew to about a fifth of the way around the circle, the snagged stooage line reel began to slide on the flying lines toward the inboard wing tip due to the end of the stooage line being anchored to the weighted (20 pounds!) steel base plate.

With the flying lines now partially tethered to the stooage base plate, the airplane suddenly did a knife-edge flight presentation about four feet off the pavement before leveling off and changing its flight path directly toward me in the center of the circle. Needless to say I was no longer flying the airplane.

Miraculously the airplane pancaked onto the pavement just in front of me, collapsing the gear and simultaneously

So there I was, standing in the midst of my flying lines and snarled stooage line storage reel, with a flying handle dangling from my wrist by the safety thong.



grinding off about three inches of propeller diameter. It came to rest near the center of the circle with the engine screaming at high rpm. I quickly nosed the airplane over onto the spinner in order to kill the engine, and then spoke a few words of frustration under my breath. So there I was, standing in the midst of my flying lines and snarled stooage line storage reel, with a flying handle dangling from my wrist by the safety thong. I realized that I had just dodged a bullet as a first time stooage user! *SN*



Safety Reminders

I've made more than a thousand safe takeoffs using that same stooage over the years, and I always comply with these self imposed Safety Reminders:

- When using a stooage mechanism that relies on restraining the tail wheel or wheel wire, be sure that the tail wheel and wire mounting post are durable and securely installed in the model.
- Inspect the tail wheel retention collar and/or soldered keeper washer for tightness and deterioration.
- Check the tail wheel piano wire shaft and wheel offset bends for cracks or deformity, as these are conditions that may lead to failure and an unwanted release of the airplane.
- Before starting the engine always double check to make sure that the airplane (tail wheel) is restrained in the stooage.
- Keep your non-starting hand free of oil residue and the nose of the model clean so you can maintain a firm grip on the nose of the airplane.
- When starting the engine, always grip or keep one hand on the nose of the airplane to ensure that it does not lurch the airplane structure (tail wheel) against the restraining device causing damage.
- When adjusting the engine needle valve and/or using a hand held tachometer to set the engine RPM, do it from behind the propeller arc.
- Keep all loose articles such as rags, kneeling pads, battery clip leads, a dangling stop watch, and un-buttoned or loose clothing well clear of the rotating propeller arc while on the flight line. Sometimes a loose ball cap can fall or get wind blown into the rotating propeller and cause excitement.
- Make sure that the stooage pull line connection is durable and intrinsically strong. Quick-clips that are press fit onto the end of a spring loaded pin mechanism have been known to come loose and cause the release line to recoil backward and wrap around the flying lines creating control problems.
- Keep the stooage mechanism lubricated and free moving, so that a minimal amount of pull on the stooage release line is required.
- Always check to be sure that the release line is never positioned over top of the flying lines prior to releasing the airplane.
- Always walk behind the airplane and lines on your way out to the center of the circle to avoid being struck by your airplane if it releases unexpectedly.
- On your way out to the center of the flying circle always scan the area around the outside of the flying zone for unwanted pedestrian observers, wildlife animals such as geese or birds, or someone's pet. (I had a pony run through the flying circle once)
- After take off, always back a couple of steps away from the stooage line to avoid getting your feet tangled up in it.
- Avoid performing a hot landing right on top of the stooage line, especially if you are flying over grass. A wheel pant or gear wire could snag on the stooage line and damage the airplane and/or the release line. *SN*

CLPA Rules

By Keith Trostle

The CLPA rules changes that are in effect as of this January 1 have been reviewed in the last two issues of *SN*. The AMA rulebook is available at the AMA Web site and can be downloaded. You can order a complete copy of the rulebook from the AMA.

The AMA has also published a new *Contest Board Procedures* booklet, also available from the AMA website. There are a few changes, but the primary one of interest for most CLPA enthusiasts will be that the submission deadline for rules change proposals is now December 31, 2009. (It had been three months earlier during previous rules change cycles.)

That means we have most of this year before any change proposals need to be submitted. The proposal forms are the same before and are also available on the AMA website. The dates for the initial vote, cross proposals, interim votes, and final votes have all been revised but will not occur until 2010. This column will keep you updated as proposals are received and on considerations being made by the Aerobatics Contest Board.)

Your Control Line Aerobatics Contest Board members are (by AMA District):

I: Dave Cook, 46 Maple St., Norfolk MA 02056

II: Tom Hampshire, 430 Greenwich St., Belvidere NJ 07823

III: Robin (Bob) Hunt, Box 368, Stockertown PA 18083

IV: Scott Richlen, 5133 Bradfield Dr., Annandale VA 22003

V: Bob Dixon, 1351 Tristram Cir., Macon GA 31220

VI: Allen Brickhaus, Box 206, Golconda IL 62938

VII: Bob McDonald, 28746 Westfield St., Livonia MI 48150

VIII: Gary McClellan, 7812 Bayshore Ct., Ft. Worth TX 76179

IX: John Holliday, 10421 W. 56th Terr., Shawnee Mission KS 66203

X: Keith Trostle, 971 N Circulo Zagala, Tucson AZ 85745

XI: Paul Walker, 25900 127th Ave. SE, Kent WA 98031

Note that Scott Richlen in District IV has replaced Warren Tiaht who recently moved to Arizona.

As many of you know by now, Gary McClellan has stepped down as chairman of the CLACB and I have been appointed as the chairman by the AMA President,

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Dave Mathewson. Although our CLPA rules have changed little over the years, there have been constant refinements and there are more to come. In fact, I believe that one of the reasons that CLPA has remained one of the best supported CL activities, if not the most popular CL activity in this country, is the stability that we have maintained in our rules. My goal as Chairman of the CLACB is to ensure that whatever changes are made to our rules will continue to improve our event for all those who participate in it.

In the last issue of *SN*, I mentioned a few areas that might be reviewed during this next change cycle, including the elimination of Pattern Points, the weight and line size charts now that the pull test and line sizes are based on model weight, not engine displacement, the “ever popular” subjects of the Builder of the Model Rule and Appearance Points, and the “wind arrows” that appear in the diagrams of four of the maneuvers in our rulebook.

Other topics for consideration during the next year include:

1. Methods to weigh and pull test our models given the new rule that the pull test is based on model weight.

2. The wording for the maneuver descriptions for Inside and Outside Square loops is not consistent. This needs to be changed.

3. Do we want to consider changing the scoring range for each maneuver from the current 10 to 40 points to 0 to 40 points? I understand that George Aldrich was the “architect” for our current pattern and he had initially submitted a sample score sheet with the 0 to 40 point range for each maneuver. When the rulebook was published with the sample score sheet, somehow the 10 to 40 point range was introduced

4. I know that we are going to get any number of proposals regarding BOM and Appearance Points. My basic philosophy is that we need to keep some form of a BOM requirement. Given the way the CLACB has voted on this matter over the several previous change cycles, it appears that the Board also favors the BOM requirement. Given that some contests (seemingly more so on the East Coast) are held where there is no BOM requirement and no appearance points, it should be recognized that such a procedure is entirely legitimate as long as it is announced prior to the contest. So it

is already possible now to hold such contests without changing the basic CLPA BOM rules. This needs to be recognized and appreciated by those who want to do away with a basic tradition that many others feel is important to this event.

a. We are going to see at least one proposal that suggests a system to have a scale of some sort that awards different levels appearance points for different levels of construction, assembly and finish. This idea has some merit, but it will need to be carefully constructed to not introduce its own set of problems by inaccurate wording that can lead to faulty interpretations. If some are indeed planning on such a proposal, it would be helpful to the Contest Board to explain how the system has been demonstrated at actual contests.

b. There may be other proposals to somehow redefine the current “interpretation” for our CLPA BOM rule that is in the rulebook Here again, emotions should be put aside and explicit and practical wording be submitted.

5. Do we need to revise the number of Appearance Points? One approach is to increase Appearance Points to 40 like it was in the '60s and '70s where there were 10 points each for construction, realism, originality and finish. Some feel that appearance points now are inappropriately based solely on finish. Or decrease the appearance points to 10 or even 5. Reduced maximum appearance points will decrease to some degree the impact of appearance on the total score. There are legitimate arguments for either case.

6. The Judge’s Guide can be a useful tool for judges and pilots alike. It is recommended that all enthusiasts critically review the guide for possible improvements. This guide was originally written for the FAI F2B pattern. Since its incorporation into our rulebook, there have had to be several corrections made so that the guide more closely agrees with our AMA maneuver descriptions and diagrams. There still may be some areas in the guide where such adjustments would be appropriate. *SN*

Comments will be appreciated. Contact Keith Trostle, Chairman, CLACB; stunteagle@cox.com.

Crash Repairs

By Windy Urtnowski

Something lots of pilots overlook is a small repair kit to keep with their tools. Yes, too many times I've said to myself, "Probably somebody will have epoxy, fiberglass, or CA." The problem is that when you need it, you need it ... and time is money. I've learned to put together a small repair kit that I always keep with me. It's paid off many times—sometimes even for my competitors.

...use some CA or tape to seal the repair until you get back to your shop to do a permanent repair.

A basic kit—just a small box—with CA, kicker, five-minute epoxy, some small balsa scraps, fiberglass cloth, a small piece of plywood, some nail files, and sandpaper will pay big dividends the day you need them. I also keep a few #11 blades, a small Zona saw, and Scotch tape in my kit, and I add things over time whenever I see a need at the field.

Going beyond just a small repair kit, a foam pad is very handy for laying the ship on during repairs. John Cafaro carries a spotlight in his vehicle for repairs, and he's used it to good advantage many times when it has started getting dark at the field.

At the Brodak Fly-In this year, I had to do a repair just before dark and wanted to get it done and get a test flight before darkness set in. My repair kit had everything I needed. Dan Banjock needed to repair his ship's rudder at the Nats, and he used his kit without having to chase down supplies or go back to the motel room.

By the way, here's another tip for field repairs: use some CA or tape to seal the repair until you get back to your shop to do a permanent repair. That will keep raw fuel and greasy fingerprints off the repaired area, and it will go a long way toward making the refinish a lot easier to do.

A field repair kit may seem like a simple idea, but trust me: it will be your best friend the day you need it. *SN*

In 1952 ...

- The *Today Show* premiered on NBC
- Elizabeth II became Queen of the United Kingdom
- A nuclear test was held in the Nevada desert

- U.S. lieutenant colonels Joseph O. Fletcher and William P. Benedict landed a plane at the geographic North Pole
- The *Diary of Anne Frank* was published
- Puerto Rico became a self-governing commonwealth of the United States
- TV debuted in Canada as the CBC in Montreal, Quebec aired

- United States presidential election, 1952: Republican Dwight D. Eisenhower defeated Democrat Adlai Stevenson
- Albert Schweitzer won the Nobel Peace Prize
- In the United States, a mechanical heart is used for the first time in a human patient.

And this young man was tinkering with model airplanes even then. Can you guess who?

Send your guesses to Bob Hunt.



Safety

By Leonard Neumann

I am starting to write this column for a second time as a result of using an unknown “expert” to “fix” my computer. My computer had started to freeze up on certain programs, seemingly whenever it wanted to, and ultimately making it impossible to even use them. So finally I had decided to get it fixed.

Since the “Geek Squad” charges more than this 7-year-old computer is now worth, I turned to an “expert” who said he would charge no more than \$50 to fix it. And he even offered to come

thing with our model airplanes, don’t we? Who do you call on to launch your airplane when it is your turn to fly? Especially when you are at a contest, things are getting hectic, have you ever asked someone whom you didn’t know to launch for you, and done so without any instructions of any kind? (Kind of like asking this guy to fix my computer, isn’t it?)

But even if you know the person, even if the person is experienced at launching, maybe we still need to... okay, let me tell you a story. True

flyers give signals that aren’t quite as obvious. I was holding Bob’s plane and watching him while waiting for him to give a signal. Bob had picked up the handle, checked the controls, it looked like he was ready—and then there was an arm motion. So I let go.

No, that wasn’t the intended signal to launch, but fortunately, I had watched to see that he appeared to be ready. And he had watched to make sure all was well at my end. And, although I launched a bit sooner than he had anticipated, all was well. But, what if...?

Safety! That is the subject of this column.

over to my house and fix it in my presence.

Well he came, fiddled around with it, and then decided he needed more than what he brought with him. He offered to take it back to his house with the promise that he would have it back to me before the end of the day. I warned him that I had some files on it that I couldn’t lose and he “promised” he wouldn’t touch any of that. With that, I let him take it. And that was error number two.

Well, three days went by, and it still wasn’t fixed. After numerous calls, I found out he had attempted to move everything to a new partition and then reformat the hard drive with the usual consequences—yes, he lost everything including the “Safety” column I was working on.

Oh, and even after I got it back, the computer is locking up worse than ever. Where is Chuck when you really need him? (If you don’t watch much TV, just ignore that last comment. It would take too long to explain.) Making a long story short, he didn’t get paid and a new Dell computer is now on its way with all these nice bells and whistles that will soon be obsolete again.

And what does all that have to do with a “Safety” column, you may ask? (And, yes, you may ask.) I got to thinking afterward how I had put my trust in someone I didn’t know, in a person who had just moved to town a couple of weeks ago with no references, and the disaster that followed.

But sometimes we do much the same

confessions, now. I remember once when Bob Hunt asked me to launch for him for a practice flight at the Nats. (Yes, the same Bob Hunt who is now the editor of our *Stunt News*.) We had known each other for a number of years. I had been around airplanes for a long time and had launched Matt for thousands of flights. But ... and here is the kicker ... I had never launched for Bob Hunt.

Oh, “What difference does that make?” you may ask (and maybe this time you should ask). What is his airplane like? How much does it pull? Where is it best to hold it? How do you prefer that I launch it? Oh, and what signal are you going to give me? (This last one is kind of important.)

These were all questions that I didn’t ask, but should have. I know with (number one son) Matt, he has certain places he prefers that you hold the plane: right hand cupping the right wing, left hand holding the left stabilizer. Do not push down and just let it slide out from under your hands. That is what I do, but I am also aware that it does pull.

One person who was used to launching a plane powered with a Fox almost lost Matt’s plane when he held it for the first time. Another jammed the tail wheel into the tarmac trying to hold on (I did say it pulled). And for Bob, well there wasn’t anything different about his plane, really, to cause any surprises there, except we had never discussed the signal he might give me to launch.

Now Matt uses a sweeping arm gesture that you just can’t miss. Some

What if the person who is launching sees you do something that he thinks is the signal and you aren’t watching? What if he moves the plane a bit and it ends up pointing into the circle as it takes off? What if he isn’t aware of how much it will pull and lets it lurch forward as the engine starts while you are kneeling in front of it? What if he grabs the wing too hard in the wrong place and actually crushes it? What if...?

What I am getting at is, if you don’t know the person, and/or the person doesn’t know you or your airplane or how you want it held or released, make sure you give him or her a few directions before you enlist that person for the task. Tell them where to hold it, how to hold it, how to release it, *and the signal that you will use*. (I know, I am shouting, but I wanted you to see that.)

Safety! That is the subject of this column.

Recently there was a post on our Stuka Stunt Control Line Forum (www.clstunt.com/htdocs/dc/dcboard.php) that a modeler from Spain had posted showing how he had made a four-blade propeller. He had earlier posted a picture of his model, powered by an RO-Jett 90 and the four-blade prop that it was sporting, and someone on the forum had asked him how he made it.

This post was made as a response to the question including pictures of the process, all of which turned out to be good thing. Well, I say a “good thing” because this is a safety column, and the prop, as he made it, did not appear to be safe. In fact, shortly after he posted his

tutorial on how he had done it, I got an e-mail from Keith Trostle suggesting that maybe this post should be deleted because using the construction methods he used is just not safe.

It is bad enough when what we do is not safe; it is worse when we (even unintentionally) encourage others to do the same. But by the time I entered the forum to look at this post, several others had already posted a warning that this prop was doomed if he tried to use it. And not only the prop, but it could take with it the engine, the airplane (from vibration), and anyone standing in the path of one of the blades as it flew off.

Now I am sure there are a number of people who would like to acquire a simple four-blade prop for their (whatever) design in a diameter or pitch that is not readily available commercially. Four-blade carbon fiber props have been around for quite some time, and with the carbon fiber strands going around the hub and out the length of each blade, these are quite safe. They are expensive, however, and not available in every size and pitch. In this case the modeler was looking for a prop of the proper size for his .90 cu. in. engine, and in a pitch that would work for our Control Line Stunt applications (and that is a big requirement). Not being able to find one on the market, he had decided to construct one out of two 15 x 4 wooden Zinger props (making a 15 x 4 four blade).

I am including several pictures here of what he had done. Again, I warn, do not try this! I want to add that his craftsmanship was excellent as was his intent. He had used a plywood center glued with epoxy to join each of the blades along with another piece of

plywood in back and a machined aluminum piece in front. It all looks good until you remember the pounding that it will take. Zinger makes one commercially but they use a larger machined aluminum hub in front and back with two aluminum pins going through and supporting each blade. And I have to admit, even that one scares me.

As people made their comments, our modeler made several modifications to this prop, but the warning remained the same. And these weren't lame warnings. Several of the people who commented were engineers. A chart was posted showing the instantaneous torque pulses of an ST 46 to be a whopping 1600 in-oz, or 8 foot-lbs. And this was an engine with half the displacement of the engine in question.

One of the modelers who responded on this post suggested this would be a good subject for MythBusters (again, if you don't watch TV, these are a couple of nutty guys who try things out to prove or disprove certain concepts and ideas). But the fact is, it had been tried. Several people chimed in stating results they had had with smaller props and smaller engines and stating that not only did the props shed their blades in seconds, but in several cases the vibration was enough to completely shred the nose of the airplane. And even if it took longer, if you had a prop that lasted minutes or hours, waiting for that thing to explode is not what this safety column is all about.

As a result of his post and the comments that followed, the modeler decided in the end to craft a carbon fiber prop for flight and use this one simply for display. (Good idea.) He had no intention of trying out the prop even on a test stand, and the prop would probably have lasted only a few seconds if he did.

Hoping that I have gotten the point across in this column, I am going to

repeat myself. Don't do it. Don't even try.

Quite often when we come up with something new, people will say (or think) "Will this will be good enough for me, or for my application?" My question is, "Will it be 'good enough' for everyone around?" And for how long?

Even if you strengthen the center section considerably, propellers that are taken apart and glued together to make multiblade props are only going to get weaker with time with the stresses that are placed on these blades. And you never want a prop to shed a blade. When we are talking about safety, we cannot settle for what we feel is "good enough." When we are dealing with safety, we want to be absolutely sure.

I am going to conclude this section with a comment made by Keith on that thread. I think it is good for everyone to read and to remember.

"Come on people, homemade multiblade props can be a source of serious injury. One of these blades being shed can be dangerous. Nothing can be worth the risk."

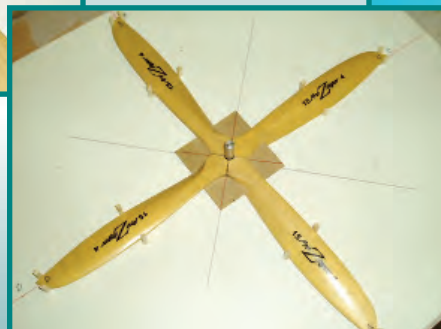
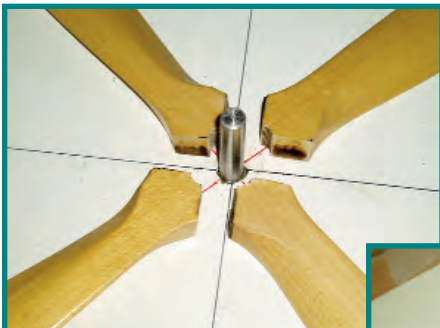
Just remember that. Nothing is worth the risk.

By the time you read this column it is going to be getting close to spring. Things will be warming up soon for everyone (we don't all live in the South) and flying for everyone will be just around the corner. As you get your planes out, be safety conscious. Don't take risks.

If anyone has any item that you think would be a good topic for this column, you can contact me by e-mail at LeonardNeumann@att.net or through our Stuka Stunt Control Line forum (see link above).

Until next time, fly safely. And don't stick your finger in the prop. **SN**

e-mail: neumann@cilstunt.com



Read the text about this group of photos! This looks like an intriguing idea, but it is not something that is suggested to do. Propeller safety is of great importance and this prop is likely to break or separate under load. Nice workmanship, but a great safety hazard!

E-Stunt

By Rudy Taube

One of the most common questions I am asked, both at the field, and via e-mail, is: "What motor, battery, etc., should I use to convert my Beryllium Sphere Powered Stunter to fly on clean, quiet, reliable, electric power?" Because of the ever decreasing supply of Beryllium Spheres and the loud noises they make while exploding, I hope this article will help people in their transition to electric power.

Below is an outline of three systems for different size ECL planes. There are more alternatives, but these are systems that Will Moore, Mike Palko, I, and others have come up with over the past several years. This will at least narrow your search and allow you to get down to a "turnkey" system for each size ECL plane.

I am a big fan of using name-brand products. The products listed below are quality products that are well tested, and backed by very good customer service and tech support. There are many other good options out there from some not so well known manufacturers, and there is some cheap, poor quality stuff out there too. It is often difficult to tell the difference unless you are already knowledgeable about electric power systems for our models. If you are already flying electric and have favorite systems, by all means please feel free to use them. These recommendations are proven in E-Stunt but not meant to be an all inclusive list of what is available. The systems below should help make your transition to quiet, reliable electric power a successful and pleasant experience.

ECL systems for three different size models:

1) 510 to 630 square inches and up to 64 ounces TOW (Take off weight)

Motor: AXI 2826/10 or Plettenberg Orbit 15-16 or 15-18

Battery: 4S 3700-4200mAh

ESC: 45-amp Castle Creations (CC) 40 or Jeti-Spin 45

Timer: JMP, Z-TRON-4, Hubin or KAZ/FMA

Prop: APC 12 x 6 E prop

2) 600 to 680 square inches and up to 70 ounces TOW

Motor: Plettenberg Orbit 25-12 or 25-14 or HACKER A40-12S

Battery: 5S 3700-4200mAh

ESC: 45-amp

Timer: see above.

3) 650 to 800 square inches and up to 80+ ounces (higher weights with 22.2V battery)

Motor: AXI 4120/14 or Plettenberg Orbit 30-12 or 30-14

Battery: 5S (18.5 Volts) 3700-4200mAh. A 6S (22.2 Volts) battery may be used in the future for larger/heavier planes than we typically use today in CLPA.

ESC: 45 to 60 amp

Timer: see above

Prop: APC-E 13.25 x 6, or APC-E 15 x 8

These three sizes will cover most of our ECL needs. They cover the common planes used in Old Time, Classic, PAMPA Classes, and FAI. In future columns I will outline systems for some smaller CLPA planes.

Here are the links to some of the outlets I use for the various parts listed in the three setups above:

Batteries:

Thunder Power and Flight Power are the two largest manufacturers of high quality batteries for our electric models; CL, RC, Cars, etc. They both provide excellent customer service. There are other



Top: Mike Anderson's E-Ray Fleet. Below: Mike's E-MiG 3, Des Moines, Iowa.



Left: Bob Hunt holds his original design Genesis Extreme. Bob converted this model from glow to electric and two weeks later flew to a berth on the 2006 FAI F2B team. He's shown here at the annual NEAT Fair, where he performed a demonstration flight. Bob's model has 630 square inches of wing area, weighs 54 ounces (with a 4S2P 4000mAh battery pack onboard!) and utilizes an AXI 2826-10 motor and a Phoenix 45 ESC.

brands, but the quality and reliability varies widely outside the above two name brands.

Thunder Power batteries: <http://thunderpowerrc.com/>. They are assembled here in the USA (LV, NV). Nice people, I go to the factory when I'm home in LV. They have a large, first-class modern facility. They are interested in helping us with our ECL application.

Flight Power "EVO LITE" batteries: www2.towerhobbies.com/cgi-bin/wti0001p?&P=SM&I=LXRVT5

Motors:

AXI: www.hobby-lobby.com/brushless_axi.htm

This Web site has a lot of useful information. I have dealt with Hobby Lobby for decades and they have always provided excellent customer service, with a knowledgeable, helpful, tech department.

Hacker: www.hackerbrushless.com

These are high quality motors. Will Moore has had good success with these motors in his beautiful twin ECLPA plane. I have used them for many years in ERC. They have a cooling fan standard for our ECL planes. They are priced the same as the AXI, and less than the Plettenbergs.

Plettenberg: www.icare-rc.com/plettenberg.htm

These are excellent, powerful, high quality motors from Germany. They are used by many of the top fliers on our planet. Paul Walker, Kim Doherty and many others use them in their FAI and PAMPA planes.

Electronic Speed Control (ESC):

Castle Creations: www.castlecreations.com/products/phoenix-45.html

These are made in the USA and are very good units. You can use your computer to program them through "Castlelink," making it easy to set them up. They now have a version for our ECL planes. These are one of the most popular ESCs in use today. I highly recommend them for your first ECL plane.

Jeti—SPIN 44: <http://hobby-lobby.com/jetispin.htm>

They are great for ECL. They have a setup box to make them easy to use.

Timers:

JMP: www.bsdmicrorc.com

Very good units. I have over 300 flights on one of mine. Limited production, now made here in the USA.

ZTRON Version 4 (Available from Mike Palko): mpalko494@msn.com

Excellent timer with many useful features.

Hubin: whubin@kent.edu

New but well tested timer with all the features most of us need.

Chargers:

Thunder Power: <http://thunderpowerrc.com/html/cba-chargers.html>

The TP 1010C is the perfect, safe, user friendly charger for ECL. At \$200 this is my favorite charger, I use it the most. It can charge two of our ECL batteries at the same time!

Tower Triton-2: www2.towerhobbies.com/cgi-bin/wti0001p?&I=LXM AJ0&P=ML

This is a good charger. I have used one for many years. At \$130 it is a good deal.

Multiplex: www.hobbypeople.net/gallery/240074.asp

This is my second favorite charger. It is the easiest to use and a great deal at under \$90. It can charge up to 5S batteries. It gives a good bang for your buck for ECL.

Cellpro by FMA: www.fmadirect.com/products.htm?cat=45&nid=4

The Cellpro Multi 4 is a fantastic deal at its present special sales price of \$50. It does everything 4S ECL fliers need. The Cellpro 10S is one of the best chargers for E-Stunt. It will charge two 5S batteries at once and has many outstanding features, like an internal balancer, all for \$190. These are the favorite chargers of my idol in E-Stunt; Dean Pappas.

ElectriFly From Tower Hobbies:

www3.towerhobbies.com/cgi-bin/wti0001p?&I=LXVZA8&P=7

There are several models that will work for our ECL needs. One of the best is shown at the link above. It is the AC/DC Triton2 EQ. It includes an internal power supply so it runs on AC or DC power, it also has an internal balancer. This is a bargain at \$200 because it combines three items into one unit. It has many useful features.

Balancers:

Thunder Power: <http://thunderpower>

rc.com/html/cba-balancers.html

The TP 210 is one of the best balancers. It works with their charger above to charge two ECL batteries at the same time. It's a great unit and is priced at \$99. This is what I use. It works with EVO batteries too.

Flight Power, EVO Balancer: Please see EVO battery above for link.

The above links should get you started. Please feel free to contact me if you have any questions. SN

*Rudy Taube
Hermosa Beach, CA
AMA 1667
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Kim Doherty's Outstanding FAI F2B Shockwave.



Richard Sawicki's ECL fleet in many sizes.



Jim Jorgensen's ECL Ringmaster with 123 Batteries.



Larry Wong's beautiful ECL with standard AXI setup.

The Scintillating Sixties—Part II

Stunt freaks celebrated in early 1965 as *Flying Models* carried a real Nationals-placing Stunt plane in Larry Scarinzi's Blue Angel. With that model Larry placed third at the 1964 Nats in Dallas. Stunt freaks in England did not celebrate as mufflers were mandated for all model planes in that country starting on January 1, except for those involved in FAI Team Trials. The great flier Nakke of the even greater Juhani Kari of Finland was detailed in *Aeromodeller* in January.

In the Keystone state Nationals in '65, Gialdini's big white Eclipse beat out McFarland's big gray Shark. Stunt planes were getting bigger and bigger, but too many of them still used the tired Fox .35.

Also seen at that Willow Grove Nats was Harold Price's Crusader with a Merco .49 (no retracts in this trike-gear plane), Dave Gierke's Novi I, Billy Werwage's Super Ares, Moses Quintana's Thor, Jean Paillet's Zephyr and Jerry Worth's Mirage II. Dawn Cosmillo, from New Jersey, became the first woman to win a Stunt event at the Nats as she flew her stock Nobler to a win in the Junior division.

The USA Team Trials of 1965 in Dayton, Ohio, was my first "Big Shew" experience in Stunt and I loved every minute of it as Lew McFarland's "Gofer." And I couldn't believe it when a bunch of competitors stayed up late Friday night helping Steve Wooley repair the damaged inboard wing of his Cobra (from damage sustained from a bird hit), all the while drinking various sorts of liquid refreshments.

Not having a Nikon grafted to my hand yet, I just watched every flight and didn't record a single score, flight order, engine, prop size, or whether a shirt had stars on it or not. So it wasn't until January, 2002 that I received in the mail a roll of black and white 35mm negatives from Jerry Martin, Dayton, Ohio, and there was a picture of the scoreboard showing all 14 entrants and all scores.

Steve Wooley ended up using his veteran Argus and waited until the last flight of the contest when the judges gave him everything at the field except

Gialdini's white pants. Youngster John Davis was in third place and "on the team" right down to the wire flying a big McFarland Shark. Wooley's last flight moved John down one spot and put him on the team along with Jim Silhavy and Lew McFarland.

Perhaps overlooked amid the inverted gull wing, the "V" tail, the twin "Sabre" rudders, and the wheel pants on all three landing gear struts, the Sheik article by Jack Sheeks mentioned that they raised the leadout wires in the wing tip to the top of the tip and they cut a vent hole in the top block to assist in cooling the engine in the tight fuselage—a couple of "tricks" that would gain in popularity and necessity down the trail.

Stunt planes continued to get bigger and "Jet style" had become the rage, but the guy with the little red plane huffed and puffed in Glenview and Bob Gieseke won his first National Championship in 1966. Two Sharks were right behind him with protégé Charles Reeves beating mentor Lew McFarland.

There was also a Bomber, a Gypsy, a Talon, a Venus, a Vigilante and a Chizler at that Nationals; great airplane names. Gerry Cipra won his fourth National Championship (Junior in '62 and '63; Senior in '65), once again displaying his prowess as he won by 40 points! And, at those 1966 Nats was a "Mystery Plane" named the LeSabre that has eluded identification since Jim Dunkin sent me the slide in 1995. Who was that guy, Butch?

The USA team of Silhavy, McFarland and Wooley won the World Championship Team title again at the former World War II R.A.F. base at Swinderby in England, but Josef Gabris of Czechoslovakia got the individual Gold. His Super Master weighed a scant 43 ounces and was powered by the MVVS 5.6 cc engine.

Lots of Stunt fliers also like automobiles. The year 1967 was a great one for "Muscle Cars" and arguably the best Corvette ever. (If you have ever heard a '67 Vette L-88 start up and just rumble around a parking lot you will

never forget the sound—I had the distinct pleasure of judging one of these beasts in a Concours Show in 1983, but, for some unknown reason, the owner didn't want me to test drive it!) Speaking of things for the road, Bill Melton and Jim Young had their popular "Road Runner" published in March.

Back to the surf of California in '67, and it was a slim and trim Tempest flown by most able stickman Bart Klapinski who beat "jet styles" and "old styles" and "any styles." And still there were more exceptional planes with names like Novi III, Starduster, Toronado, and the Two Bits. It's no wonder that because of the planes of the 1960s, that is probably the favorite decade of many a true Stunt flier. A surprising 33 Open fliers made the trip to the 1967 Nats, including a rookie who finished eighth on his circle and who would be back. Ted Fancher had caught the fever.

Art Schaefer called the meeting to order in St. Louis at Buder Park for the 1967 Team Trials over the Labor Day weekend. Fourteen entries showed up for the fun. Thousands of points later the team was selected to include Bob Gieseke (his second appearance), Jim Silhavy (his third appearance), and Steve Wooley (his third appearance). However, the inventors of Stunt (the USA) still hadn't won the individual championship.

Charley Mackey's gorgeous Starlight Stunter graced the pages of *Flying Models* in August of 1967 with its beautiful elliptical wing and pleasing lines.

Considered by many as the best flying plane of his squadron, the Fw 190 of Jack Sheeks opened up 1968 and Dave Gierke's Novi III followed up showing the diversity of interests in the 1960s. The muffler rule in England was partially abandoned, requiring only radio control models to use the silencers. All those Merco engine users breathed a sigh of relief, literally.

From the beaches of California to the plains of Olathe for '68 and the little red plane won again over a fantastic field that included two Walker

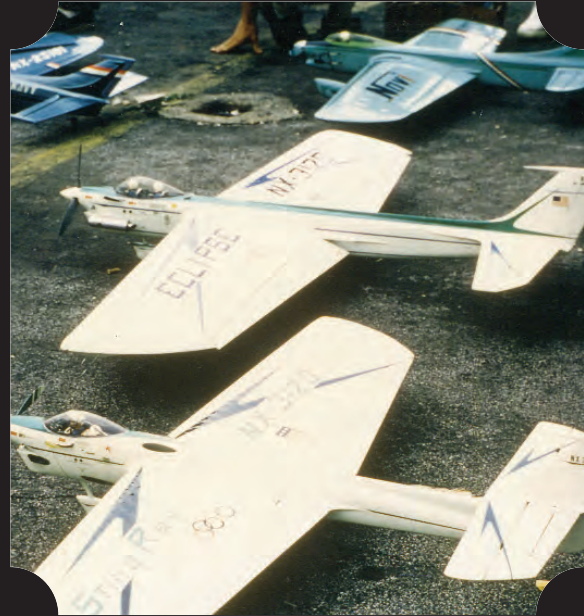
Cup winners and several "rising stars." Bob Gieseke won by 8 points over Jim Kostecky who was flying his futuristic and exotic Formula S. And down in 10th place at the 1968 Nats was one of

the few Stunt fliers who ever piloted a full size P-51 Mustang. Al Rabe brought with his Mustang Stunter a whole plethora of Stunt plane ideas which would, in short time, become

standard equipment for Stunt planes for the rest of the century and beyond.

The USA team made it three straight as Bob Gieseke (third), Steve Wooley (fourth) and Jim Silhavy (ninth) won

Wynn's Scrapbook



Left, above: Bob Gialdini and his huge Eclipse at the 1965 Nationals. Bob won his second Nationals and Walker Cup. Photo from Jack Sheeks.



The Crusader of Harold Price at the 1965 Nationals. Harold finished in third place with a Merco .49 up front. Photo from Andy Lee.

the Team Gold Medal at the 1968 World Championships in Helsinki, but the individual title eluded the red, white and blue again as Josef Gabris won his second individual title.

One of the all time favorites of the 1960s—the stylistic Formula S of Jim Kostecky—closed out the year by

being published in the December issue of Flying Models, and Keith Trostle's Focke-Wulf Ta 152 was featured in *Model Airplane News*.

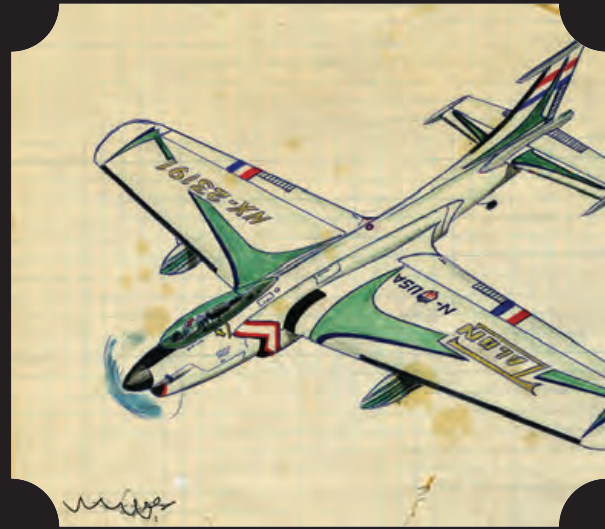
There were no less than 33 Stunt planes published in the magazines (including Aeromodeller) in the year 1968, although some of them were a

stretch to be classified as true Stunt planes.

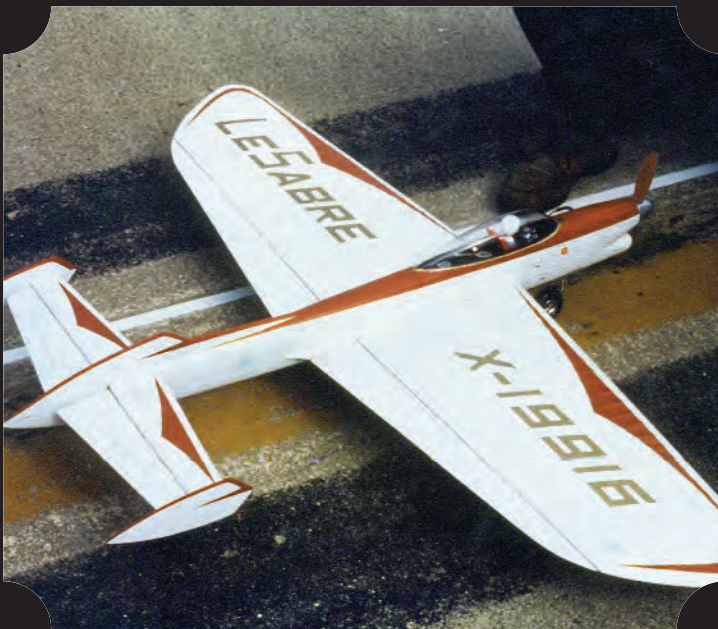
Jerry Worth's beautiful Mirage III opened up 1969 in the magazines. With masterful timing, Al Rabe's Mustang article appeared in *American Aircraft Modeler* in June, 1969, just before the



Dawn Cosmillo, Wharton, New Jersey, won Junior Stunt at the 1965 Nationals, the first woman to win a National Stunt event. Photo from Jim Rhoades.



Original pencil drawing by Jim Kostecky in 1966 of a design for his Talon. Jim would finish in seventh at the '66 Nats. Several original drawings donated to Wynn Paul's "Stunt History" by Jim.



The mysterious LeSabre as seen at the 1966 Nationals. The AMA number has long been awarded to another person. Original slide from Jim Dunkin in 1995.



Josef Gabris of Czechoslovakia won the World Championships in 1966 flying his Super Master. Photo from American Modeler and Aeromodeller.

Nationals. The Navy/Marine judges were not subscribers to the model magazines, but the Bearcat that Captain Al flew at the Nats was recognizable to them even with the Ray-Bans on.

As the 1960s closed out the Stunt world continued to take "Jet style" planes and warbirds to the Nationals. In

Pennsylvania in 1969 there was an F-86D Sabre (first), and a Bearcat (second). Bob Lampione flew last and the judges loved the Sabre even with a tree branch up front. And this was the first win for a foam wing airplane. Rabe's Bearcat thrilled most everyone for second and also ushered in the soon

to be standard SuperTigre .46 engine. Jerry Phelps' (third) Patriot looked like a Navy Thunderbird. In sixth was another "great white plane," Bill Werwage's USA-1, an outgrowth of Jerry Worth's Apterix (which also featured the prototype for cockpit detail). There was also a Spirit of



Greg Zajack, West Seneca, New York, finished in 12th place at the 1967 FAI Team Trials with his Patriot. Photo from Greg Zajack, 1994.



Phil Granderson, during his more sane days before becoming a Combat freak, finished third in Senior at the 1968 Nationals with his Elgato. Photo from O & W archives.



Above, left: Jim Kostecky, Lancaster, New York, with the exotic Formula S at the 1968 Nationals where he finished in second place. Photo from Robert McCarthy.

America (Kostecky), an elliptical-winged Novi IV (Gierke), and down in 12th place was a most unconventional twin-boom, no-flaps, no-frills Humbug of Bobby Baron.

The Team Trials for the 1970 USA Stunt team was held in St. Louis over Labor Day weekend, 1969. Prior to this

event, Jerry Phelps' best showing in National competition had been his third place in the '69 Nationals. In St. Louis everything went right for him as his clockwise flying Patriot smoked the field with Bob Gieseke in second place. With a Walker Cup, three Senior wins at the Nats, some top 10 finishes in Open

and a fourth place in the 1967 Team Trials, Bill Werwage earned the third spot on the team. Stay tuned for the yet to unfold USA-1 saga.

Stunt was pretty healthy in the 1960s. There was no column devoted to the event in the magazines—after all the old free flyer's club still ran the

Right: Bart Klapinski and his Tempest at the 1967 Nationals where he won the Open event and the Walker Cup. Photo from O & W archives.



Below: Jim Mayfield, Garden Grove, California, and his Toronado at the 1967 Nationals where he finished in ninth place. Photo from Steve Harris, 1994.



Rich Loomis, Arcadia, California, with his Two-Bits at the 1967 Nationals where he won the Senior event. Photo from slide of Jim Dunkin, 1995.

media—handle guys were fortunate to even have a column for the entire branch of CL. There were a good number of Stunt articles in the magazines. There were some good kits that could be built to fly very competitively, especially if the builder knew to substitute real balsa for the oak

planks that came with the kits.

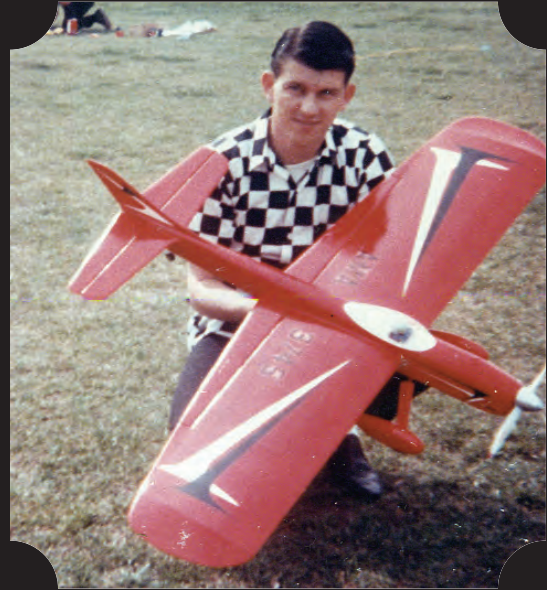
And still, the USA National Champion in Stunt was decided by non-modelers who were trained as judges for two days—try that in diving, ice skating or gymnastics. The 1960s gave us the good and the bad in Dallas, a good start in international competition, new

technology that continues in the 21st century, great airplanes, and most of all a bunch of great people who truly loved the hobby of Precision Aerobatics. *SN*

*Wynn Paul
3332 Carriage Lane
Lexington, Kentucky 40517*



A svelte Bill Wervage with the first USA-1 at the 1969 Nationals where he finished in sixth place. Photo from Keith Trostle, 1977.



As a precursor to his "Trick blue shirt with stars," here is future World Champion Les McDonald with a dazzling checkerboard shirt and his second full bodied Stunter, a Jetco Dolphin in the spring of 1968. Photo from Les McDonald, 1994.



Don Shultz, the artist of Precision Aerobatics, and his Sting Ray at the 1969 Nationals. Photo from Charles Reeves, 1994.



The Shoestring Stunter of Bill Simons at the 1969 Nationals. Photo from Jerry Phelps, 1994.



PAMPA Membership Application or Renewal Form

Please print legibly. Use one form per member. Make photocopies for multiple registrations.

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NOTE:
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ALL DUES EXPIRE DECEMBER 31st!



PAMPA Products Price List

Prices Effective January 2004

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CLPA 1451 52 (Old Time Stunt)	2.00	Colors - White, Black, Red, Sky Blue, Royal Blue, Navy	
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Classic Stunt25	Full color water transfer decals (Sheet) with one large & two small ...	2.00
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For Nationals Tabulators	2.00	1978 - \$15 (9) 1979 - \$10 (7) 1980 - \$5 (2) 1981 - \$15 (9) 1982 - \$10 (7)	
Nats Judging Guide	5.00	1983 - \$5 (3) 1984 - \$5 (8) 1985 - \$5 (9) 1986 - \$15 (4) 1987 - \$15 (4)	
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Beginner Pattern25		
Old Time Stunt25		
Critique Sheets - Modern Pattern25		
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Old Time Stunt25		
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PAMPA News and Reports

PAMPA officer reports and organizational information.

Vice President's Report

By Brett Buck

I have gotten quite a few comments about our late Sept./Oct. *SN* delivery. I guess it's a pretty good sign that so many people are so anxious to get *SN*! But, what can we say, it was late. As explained before, it was certainly not what any of us on the EC wanted but it was pretty much unavoidable given the circumstances.

And, for those who asked, no, I am not going to go into a blow-by-blow account of what happened. I think I said about what needed to be said last time. There would be no point to elaborating on it, and we have to move forward, not continue to thrash our collective dead horses. Read Bobby's "Level Laps" column in the Sept./Oct. issue for a good idea what we are trying to do from now on out.

The good news is that we are back on track. There's always the chance that something else will go wrong, and we still have the vagaries of the Post Office to deal with, but as far as I can see things are going swimmingly.

Also, with the short turnaround time, there were a few printing issues. In particular, the pictures were dark (or to my photographer's eye, had too much contrast). It was a minor problem, easily solved as you can see.

In the spirit of moving on, I would suggest that we don't rise to any provocations to get into arguments on-line. The beauty of the various on-line forums (Leonard Neumann's "Stuka Stunt" forum, Bob Storick's "Stunt Hangar," and Phil Brown's "Flitelines") is that everybody has access to everyone else—it's very egalitarian. Unfortunately, that same access permits anyone with an axe to grind to try to "push your button" and start an argument.

I am at least as susceptible as anyone to being drawn in, but the first step towards solving a problem is recognizing it exists!

The dynamics of these forums are such that people can build up animosity over long periods, and then finally "blow" over something minor. When you see someone "go off" on someone else over a seemingly minor point, you

can be pretty certain that there was a lot to lead up to it that you are not aware of.

There are also such things as "trolls." In this context, a "troll" is not a little guy with pink hair that lives under a bridge—a "troll" is a message posted in order to elicit a response, usually intended to provoke a very strong response. The definition is as in the phrase "trolling for fish"—sticking a baited line in the pond and seeing if you get a bite. A few people are pretty adept at it, and can be subtle. Most people in Stunt forums are, however, about as subtle as a brick through a plate glass window. When it's that blatant, I suggest just letting it pass, or if you just have to respond, make light of it. Don't rise to the bait—fish are too dumb to see the hook, but you aren't!

"Don't rise to the
bait—fish are too
dumb to see the hook,
but you aren't!"

In addition to the plain trolling, there are those who enjoy playing PAMPA politics and taking pot shots at each other. Flitelines tends to be pretty free of that. Stunt Hangar's policy, strictly enforced by Sparky and the other "moderators," is "no politics." A fair number of posts are deleted before you see them on that basis. SSW permits some political discussion, generally favorable to PAMPA, but there is a limit there, too.

Don't let this scare you off—with some caution, these forums provide a remarkable reference and place to share the fun. The SSW archives, formatted properly, would make a virtually complete reference to just about any Stunt topic you could imagine. Design, trim, construction, engine setup, props, finishing—you name it, dozens of top modelers have written extensively on any topic you can think of.

continued ...



2008 PAMPA Election Results

Vice President

Brett Buck * 211
Windy Urtnowski 1

Membership Secretary

Russ Gifford * 200
Rich Peabody 1
Gene Martine 1

District II Director

Windy Urtnowski * 10
Mike Ostella 1
Rich Peabody 2
Bob Lampione 2

District IV Director

Steve Fitton * 10

District VI Director

Allen Brickhaus * 26
Allen Goff 1
Larry Lindburg 1

District VIII Director

John Hill (resigned) * 21
Linda Gleason 2

District X Director

David Fitzgerald * 60
Robin Sizemore 1
Stan Tyler 1

* Incumbent

Note that all Districts, including International, vote for the VP and Membership Secretary. The District votes reflect the response in those particular districts.

Want to know how much the rpm changes on a ST .46 over a single revolution? It's in there. Want to see every single construction step for building a Rabe Mustang? It's in there, extensively illustrated by Al himself.

Want to know the exact settings used on the PA .75 David used to win the World Championship? That's there too. I would have given my eye teeth for access to even one true expert back in the '70s when I was learning to fly, by myself, in various parking lots and cow pastures in Kentucky. My sole source of information was old issues of AAM and MAN my uncle gave me.

Now you can ask questions of any number of national champions directly, and usually get an answer in hours! Worth putting up with the occasional unpleasant argument, I would say. If you don't want to see it, don't read the thread ...

The Big One in California every year is the Golden State

"If you don't want to see it, don't read the thread ..."

Stunt championships. Last year, we couldn't use our traditional site, so it was moved at the last minute to Gilroy. This year, we were back to Buchanan High School in Clovis.

The weather this time of year in the central valley is usually pretty nice—and this year was no exception. The

only complaint (and you knew that there would be one; after all I am a Stunt flier) might be that it was too calm. The nice weather led to a pretty good turnout of around 65-70 entries even without our Tucson buddies. It's a pretty good haul from there, but we missed them.

The results themselves are not too important, but I thought it was interesting that we had the World Champ, the Ukrainian champ, the São Paulo, Brazil, City Champ and at least three other US National champs in attendance. Say what you want, we must be doing something right if we get a turnout on par with the Nationals.

"...after all, I am a Stunt flier."

It's a great contest—I encourage anyone who can manage to make it to leave the latter half of October open next year so you can come on out. You don't have to be from California—the perpetual trophy has spent more than a few years in Kent WA. Otherwise, it appears to default to David's living room! **SN**

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Secretary/Treasurer's Report

By Dave Gardner

The new membership incentive has been a great success! This is being written the day before the postmark cutoff (12/31/08) for the incentive pricing. At this point, we have nearly 850 renewals and new members signed up!

At the end of 2008, we had 1,007 members, so we have over 80% membership signed on for 2009! I expect a bit of a year-end rush, to get the final incentive pricing. Please note, however, that late renewals will not get the missed copies of the publication, printed or CD!

Back issues are available to all members, both from the Web site, downloaded, or as paid print back issues. Do note, though, that all new members will get all the back issues for the current year they joined. All previous memberships from 2006, 2007 and 2008 are considered as renewals, not new memberships. "Retreads" from 2005 and earlier are considered as new members, on application for membership.

I have to say "congratulations" to a great majority of our great PAMPA membership! We sent out a comprehensive renewal instruction and most followed it in one of the several recommended responses. Some of you, however, seemed to want a little more "personal" service, by just calling me, at your convenience, and wanting me to take all your information and credit card information. I'm sorry to say that service ended at the end of 2007.

I'm still running a business, although I'm trying to retire! When I get a call in the middle of some other activity, it means I have to break that train of thought and explain why I can't stop everything and take your info. We're presumably all adults in this game and we each have some responsibilities. PAMPA went through a great deal of effort and cost to send renewal notices to all members from 2007 and 2008, so all of you would have the new membership form and instructions. For that, we expected you to follow those instructions and get a completed membership form sent in by one of several methods offered to you.

I am amazed at the number of forms sent back on the old format (2008 and back), and in envelopes other than those supplied by PAMPA for the purpose! ... and I know that most of

you got the mailer, by your admission!

I am very pleased at the forms done correctly, and sent by mail, fax and email scans, particularly the scans to .pdf, since they are clearest and easiest to print.

All that said, at this point, I have about half the renewals "officially" entered in the database. By the time this issue is due, the lists will be complete to date. A good sign of this is that you're reading this right now!

I've run some time studies on the membership entry; it takes about 12-15 minutes, per member, to make the complete entry, from receiving the mail, sorting it, preparing checks for deposit, making credit card entries, doing the banking, alpha sorting the forms and ... finally, entering the necessary info in the data/mailing base.

From this, you can see that the 400 odd some entries completed have taken about 80 hours total, with that same amount still to go. When you haven't heard anything about your membership, this is one of the reasons why.

I'm working with Bob Kruger to get the Internet-only memberships prioritized, so they can get on line. The print members have to hang on for the next mailing, so the list is hopefully complete by each mailing date.

In 2009 some of the membership and activities will be moved over to the Membership Secretary. These actual items have not been firmed up, but many Membership questions and actions will be handled separately, to spread some of the work around!

Questions relative to the mailing of



SN—since it now shows up on the website—are still many. We're going to note the mailing schedule on the website, so you'll have a reference date. All the appropriate parties are working like crazy to get the *SN* schedule back in order, so the mailing for any given issue is by the first of the month of the specific issue; i.e., May 1 for the May-June issue. All that said, we're working on a "point person" to handle such inquiries, and other such membership items.

One last item of note: We have a list of about 40 folks who are on a "complimentary" mail list, including our Hall of Fame members and AMA officers and Contest Board members. I'm very pleased to say that about 10% of those have supported PAMPA by paying their full dues! Thanks, guys!

Thanks again to all of you who have helped make PAMPA the great organization that it is! *SN*

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District I

By Dave Cook

Connecticut, Maine,
Massachusetts, New Hampshire,
Rhode Island, Vermont

We are fully into winter up here in New England. We had two snow storms just a day apart that left us with 14 inches of snow. We also had 30 mph winds with gusts over 50 mph. Anybody want to go flying? Time to build and plan for next year's contest season. It is also time to renew your NEST membership as well as your PAMPA membership. Bob Hunt and company are doing a great job on SN and there is an option to download SN from the PAMPA website, or to receive it on a CD. The nice part about the electronic version is that it is in full color!

Guerry Byers is doing a great job

pushing the NEST membership drive, and if you haven't yet renewed, do so! Send your dues to Guerry at 28 Byrd Ave., Roslindale MA 02131. We need CDs for the '09 contests, and if you are, or want to be, a CD, get in touch with Guerry or myself.

I hear that Warren Tiaht had a bout with Valley Fever since moving to Arizona but is recovering. We wish him a speedy recovery. Warren ran more National CL Stunt programs as Event Director than anyone and they were all well run and efficient. I was proud to be part of his team. Warren, in my mind, is a prime candidate for the PAMPA Hall of Fame.

Per my last column I am proposing that we run real Old Time Stunt in the NEST contests by changing the loop size to 45°, level flight to under 6 foot altitude and the Square (rectangular) Loop to 45° high by 90° wide.

There's not much else to report, so I leave you with some 2008 photos.

Keep flying, and here are some quotes to ponder:

You can only tie the record for flying low.

Try to keep the number of your landings equal to the number of your takeoffs. SN

—Dave Cook



Steve Yampolsky's Stoli being readied for flight.



A little nostalgia: the winners of the '65 500 meet in Brockton MA included Gene Schafer, Dawn Cosmello, Dick Wolsey, Bob Robertshaw, and John Wright.



Bob Robertshaw's present-day fleet.



Dave Eyskins' Starfire before an encounter with a telephone-pole brace wire.

New Jersey, New York

The 2008 contest season is now a great memory. I really had a great time this year and have come to appreciate every local meet and the people who make them possible. Thanks, everyone!

Thomas Case invited Karyn, me, and several other fliers to be his guests at the Brazilian Championships. Bene Rodrigues has been a good friend for many years—his designs and workmanship have been top shelf for as long as I can remember, and he's a contender at every contest he's ever flown in—but most of all he's just a cool guy to hang out with. Bene got to fly my Tigercat at the Nats, and he probably flew it better than I did! It was great to extend our friendship in Brazil and make more new friends. Look for an article about our adventure in this issue. Thomas Case has brought the Brazilian team to two Nats and last year's Brodak Fly-In—it's a great way for all of us who love modeling to become lifelong friends.

Dan Banjock has his Vista back flying after a big repair and a small repair during competition at this year's Nats. Congrats go out to Dan for some really great flying. It shouldn't be long before Dan will be in the Top Five Fly-Off (in my biased opinion)!

Mike Cooper has his Dreadnaught pretty well sorted out, and it's great to see the friendly rivalry developing between him and Brian Manuet. Both are getting to be top-level competitors, and the rivalry is surely increasing their individual flying proficiency.

But the guy who's really improved this year is Rich Giacobone. He got a well-deserved second place at the Lee MA meet, and he's practicing regularly. Rich already has a new ship that's never been flown yet. How's that for a head start on the building season!

Bob Krug, our local Powermaster fuel distributor, is another pilot who's made great progress in 2008. He's got two Stregas now, so watch out for him in 2009.

Ohio, Pennsylvania, West Virginia

On September 13-14 2008 the North Coast Control Liners put on their annual Stunt contest. CD Dave Heinzman and his work gang did well. The weather was a little tough though. Every flight was rained on Saturday, and Hurricane Ike blew through on Sunday. It was a Stunt contest, so it was still fun.



John Paris from Clio MI holding his SV-11 won PA Expert. Dave Evar photo.

In OTS on Saturday the top six places went to the owners of Vikings. You could say it was a Viking day.

If there was a High Point/Iron Man trophy, John Paris would have taken it home. John won PA Expert, Profile, and ARF; he placed second in Classic and third in OTS.

Now here are some Cleveland contest photos.



Patrick Rowan from Poland OH holding his PA 40 UL piped Destroyer took second place in PA Expert. Evar photo.

District II

By Windy Urtnowski

Bill Hummel gave us a tour of his shop when we attended the Lee meet. This is by far the biggest shop I've ever seen, with probably 100 Stunters in all. There are Classics models, PAMPA ships, ARFs, foamies, and built-ups. The rows just go on and on. Bill might have the most Stunt models under one roof, but the real fun begins at the cookout Bill and Ann throw each year on their back deck. Thanks, Bill and Ann!

Mike Palko's electric P-51 Mustang from Bob Hunt plans is about as flawless as anything I've ever seen. My hat is off to Mike on some very creative stuff that's probably a preview of our event in the future. His flying at last year's Nats and Brodak Fly-In was very, very competitive. Way to go, Mike!

Buddy Weider won both Classic and PAMPA Expert Stunt at our fall GSCB meet flying his Bob Hunt-designed Caprice. I suspect it's not the last time we'll see him in the winner's circle. He's been working hard, and he has my congratulations! *SN*

District III

By Patrick Rowan



Phil Spillman from Hermitage PA took third place PA Expert with his ARF Smoothie. Evar photo.



Grace Paris from Clio MI won PA Intermediate with her Bucaneer in a hard fought battle with Turkey Vultures, Nelson Erbs, Don Sopka and high winds. Evar photo.



Nelson Erbs from Cleveland OH took second in PA Intermediate with his Vector 40. Evar photo.



Don Sopka from Broadview Heights OH took third place PA Intermediate with his ARF Nobler. Evar photo.



Bob Hudak from Grafton OH won PA Beginner class with his Akrobat. Evar photo.



Michael Paris from Clio MI took second place PA Beginner class with his ARF Super Clown. Evar photo.



Eric Keller from Edenburg PA holding his fourth place PA Intermediate ARF Primary Force. Evar photo.



Clyde Ritchie from Wooster OH holding his Fox .35-powered Nobler. Evar photo.



Wayne Buran from Medina OH holding his ARF Pathfinder powered by an LA 46. Ike made sure this is the last photo of it in one piece. Evar photo.



Bob McDonald from Livonia MI with his Classic-winning Strathmore Stunter. PA 40 UL powered. Evar photo.



Dave Johnson from Canal Fulton OH won OTS with his O.S. .35 FP-powered Viking. Evar photo.



Patrick Rowan took second place in OTS with his LA 40-powered Viking. Evar photo.



Ray Rowh from Norton OH holding his fourth-place OTS Viking powered by an LA 40. Evar photo.

Till next time, fly Stunt. *SN*



Hi there everybody! My name is Steve Fitton, and it's my pleasure to be your new PAMPA District Director for District 4! For those of you who have not met me in person, I'll give you a little background. I've lived here in Virginia since I got out of college in 1990, first in Richmond, and since 2003 I've called Williamsburg home.

Like a great many Stunt fliers these days, I got started as a kid, and then after a long layoff for school, etc., I started back again in my late 20s. My beginning wasn't too auspicious; Dad gave me a green Cox P-51 when I was 7. I "figure 9d" it on its first flight, and refused to pick up a handle again until I was 12, when I soloed on a Cox F-15.

Not too long after that, I noticed some "old" guys flying what seemed massive, powerful CL planes at the school yard on Tuesday evenings. These "massive" (they were Ringmasters and Flite Streaks!) planes had me hooked, and with the help of Alan Zwaaf and the rest of his club, I started on my journey.

When I moved to Richmond, I met a gentleman by the name of Jimmy Paul, who showed me the pattern and patiently—very patiently—watched me crash a barrage of airplanes until things finally started to click. When Jimmy took me to my first contest at Fentris NALF in 1998, I met Mike Garmon, Willis Swindell, John Tate and the rest of the Norfolk Aeromodelers, and made friendships that helped me enormously over the years. Now, a dozen years into my Stunt career, I'm humbled to be asked to represent District 4. I'll do my best!

First off I'd like to offer a big thanks to a job well done to our outgoing Director, Bill Little. Bill was asked to represent District 4 during one of the more difficult times in PAMPA, and had to work through a lot of adversity to get

his job done. Now that the burden of directorship is lifted from his massive shoulders, I hope to see more of Bill and Aaron out at the contest circle! We've missed you guys!

Autumn is one of the busier times in District 4, and I have two contests to mention here. In late September, the Northern Virginia Club put on their yearly Stunt contest. This is a relatively new event in the district calendar, but it's gathering momentum and numbers every year. This year the club dodged a bullet fired by Tropical Storm Kyle, with a very grim forecast the day before the event. As it happened, the rain held off until all the officials had been completed and the winds were gentle.

The NVCL flying site has two well tended grass circles, and the contest format is a one-day affair with the four PAMPA classes and OTS being flown. Northern Virginia is only about three hours or so down I-95 from Philly, so mark your calendars you District 2 and 3 guys for next year!



A view of the pit area at the NVCL contest. Richelin photo.



The crew of trophy winners at the NVCL contest in September. Richelin photo.

In October, the leaves started to turn and all of our thoughts throughout the district turned to the fall Huntersville contest. Little did we know that fall would be giving Huntersville a pass and winter was on its way! Those arriving on

Friday to practice found the forecast of light and scattered showers to be utterly false. Cold, soaking rain fell all day long, with short breaks into drizzle that tempted a few pilots to attempt some practice, but almost every time somebody pulled a plane out of the car the rain regrouped and it started to pour again.

Some of the smarter individuals drove over to the nearby Joe Gibbs Racing shop, and got to take a look at the facility and they even got to meet Joe Gibbs! They came back dry and with some great stories to tell. The rest of us sat around and swapped stories and watched the rain fall till everyone headed back to the hotel.

Saturday morning brought cold temperatures and winds gusting 15 mph plus right over the trees that line the western side of the field. The conditions kept the pilots on their toes, but with some skilled flying by all involved, there were no major crashes throughout the day.

By the end of Saturday, John Simpson had come in first in Nostalgia '79, Charlie Reeves had won Old Time Stunt, and Tom Dixon had won Profile. As the afternoon wore on, a few diehards tried some practice flights for the PAMPA classes on Sunday, but abandoned the efforts quickly as the winds never let up all afternoon.

Saturday afternoon did witness one disaster though, as Dan Banjock, undaunted by the windy conditions, put up his infamous all metal MiG-15 for a demo flight. The pulse jet roared to life and made a few laps when the down line broke. The stricken jet zoomed upward quickly enough to flame out the engine and attempted to do a loop. It rapidly ran out of airspeed and lift at the top of the circle, stalled, and then plunged to the ground, landing almost level but with a tremendous sink rate. There was a sound of rending metal and parts flew everywhere. The model was somewhat intact, but it will take some serious metalworking skills to bring it back. Good thing the irrepressible Banjock is both a great metalworker and master of repair work (reference his Suzy Q and Vista!). Maybe the jet will be ready to fly again by Nats time ...

Sunday at Charlotte saw a return of the wind and cold, but in PA Expert Dan Banjock recovered from the jet accident to place first with his Saito .72-powered

Vista. Since Dan got robbed by rain of at least two victories this past summer, he was delighted to take his first-place trophy back to Philly with him.

Beginner saw David Smith win with a Fox .35-powered Bi-Slob (!), Gavin Barry won Basic Flight with a Brodak .40-powered Smoothie, Intermediate saw Artie Jessup get his first victory with a Nobler powered by a Magnum .36, and Willis Swindell and his Saito .50-powered Phoebus Stunter conquered the field in Advanced. This victory earned Willis the Ringo perpetual trophy, which originated with the Norfolk Aeromodelers club, so the trophy is going back home for the next year. Great work Willis!

That's a wrap till next time. Winter is closing in, and the King Orange looms on our calendars. For those in District 4 who routinely brave the cold in north Florida in January, let's hope we get some great weather! SN



Clayton Berry with his original-design profile ship. Derived from Sig Twister, LA .46 power, Clayton used it for Profile and Expert at Huntersville.



John Rakes flies his LA .46-powered Cardinal in Advanced at Huntersville. John placed third with this flight.



Advanced pilot Terry McDowell and his Ro-Jett .65-powered Vega Stunter. The Carolina gang (Terry, Tommy Luper and Larry Draughn) have really mastered some amazing silver paint jobs!



This looks like a tough crowd here! Jimmy Welch, John Tate and Willis Swindell take in a flight during profile at Huntersville.



SN Editor Emeritus Tom Morris shows up at Huntersville not only to sell his excellent wares, but he gets to fly his profile Cavalier. Martine photo.



John Rakes shows off his Ro-Jett .76-powered Strega. Martine photo.



Eddie Ruane holding his Tempest 40. This plane is built around a Vector 40 wing, uses ST .46 for power, automotive paint finish. The ST power package handled the wind very well! Martine photo.



Derek Barry prepares to give Eddie Ruane a launch for a flight in Expert on Sunday at Huntersville. Martine photo.



Dan Banjock's MiG-15 looks like it had a run-in with a few F-86s! A broken line laid the jet low. Dan was hopeful it would be repaired soon.



Artie Jessup fuels his Nobler for what would be the winning flight in Intermediate. Martine photo.

I want to start this report off by thanking Louis Rankin for filling in for me last time. I spent the month of September in Baton Rouge helping on restorations after hurricane Gustav went through. It was interesting. I think there were enough oak trees on the ground to supply every person with a wood stove or fireplace in District 5 with firewood for at least this winter, if not more.

Since I was out of town I didn't get to go to the contest in Clanton, Alabama. While I don't have any pictures I do have some results. The turnout was a little low, but this was probably because of the gas shortage at that time. The Central Alabama Stunt Squadron club has a very nice site, so maybe more of us can get there next year.

On Saturday Basic flight was won by Dee Tison and OTS was won by Tom Weedman. Profile had Curtis Comer first, Tom Morris second and Tom Weedman third. John Simpson was first in Classic, with Bob Dixon second and Tom Morris third. Tom Weedman also won the Warbird event.

Sunday had Ty Marcucci first in Intermediate, with Jim Oliver second and Curtis Shipp third. Advanced was won by Tom Morris with Tom Weedman second and Ronnie Thompson third. John Simpson was first in Expert, Tom

Dixon second and Bob Dixon third. Darrell Mims was the CD.

I did get to go to the Huntersville NC contest in mid-October, but will let District 4 handle the results on that. There was a good turn-out, even though the weather was windy and cool. There were at least 10 District 5 members in attendance.

I was also unable to make it to the Tampa Bay Line Flyers contest in November due to my work schedule. Eric Viglione did send me a brief report and a few pictures.



Eric Viglione's new Starfire with PA .61.

It appears that it was Owen Richards' weekend. He was first in OTS flying a Humongous, Wayne Smith was second flying a Buster and Eric Viglione was third flying a Zilch. Owen then went on to win Open flying

a Pathfinder, Eric was second with a new Starfire and Wayne Smith was third with his Tracer. Sam Neible was first in Beginner using a Flite Streak. Bill Rich and Jim Silhavy were judges and the CD was Ray Thompson. Here are a couple pictures from that weekend.



The line-up in Tampa Bay.

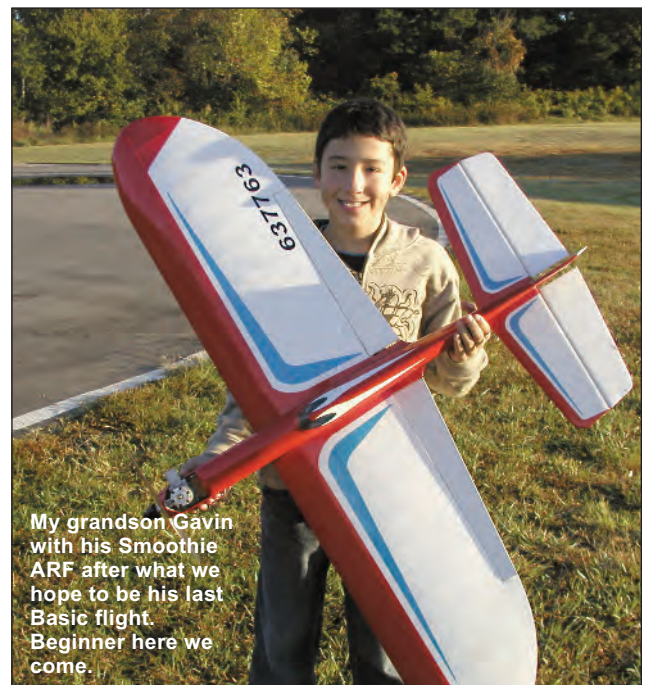


Either Jim or Wayne Smith's Tracer.

Here are a couple pictures that I took in Huntersville. Til next time, keep your lines tight. SN



Walter Umland's new prototype of Les McDonald's Stiletto 660.



My grandson Gavin with his Smoothie ARF after what we hope to be his last Basic flight. Beginner here we come.

District VI

By Allen Brickhaus

Illinois, Indiana, Kentucky,
Missouri

This issue we deal with some 2008 Nats photos, some shots from the Lexington, Kentucky, contest and the Western Kentucky/Southern Illinois Stunt Champs held in Paducah, Kentucky. This was a nice summer for contests. With the exception of a few weather gaffs, the conditions were somewhat decent for displaying one's own skills in front of judges and spectators alike. *SN*



Charlie Reeves is pumping his Big Job through the paces at the "L" pad during a practice session during the '08 Nats in Muncie.



Grace Paris won the Junior/Senior division of Beginner Stunt at the '08 Nats with a Buccaneer 740. Her dad has done a fine job at passing on his skills with her and her younger brother.



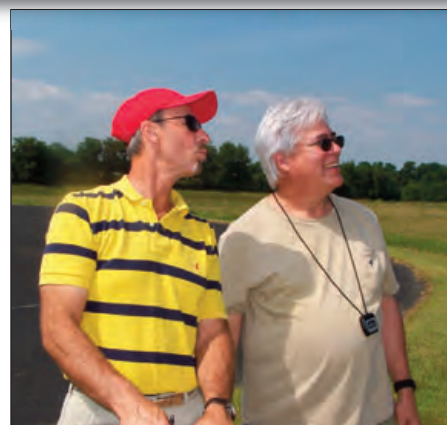
Phil T. Granderson was set above the pack with his fine Zealot at the Nats this past summer. What a gorgeous piece of work Phil has accomplished.



Jim Lynch displays his new Bill Werwage Super Ares in Charlie Reeves' back yard.



Jim Lynch holds for Louis Rankin's GEO JR at the Nats in Muncie. This was one of Louis's official flights.



Kenny Stevens and Ed Robbert take on judging duties at the Lexington, Kentucky, summer contest.



Carl Lovins prepares for launch with Eric Taylor at the Lexington, Kentucky, event last summer.



Ryan Taylor and Paul Taylor of Collierville TN drove to Paducah to enter the '08 version of the Western Kentucky/Southern Illinois Stunt Champs in the Beginner event.



Profile event winners were Dennis Vander Kuur, Bob Whitely and Kenny Stevens.



Bob Storick's Continental XL won the PAMPA Pilots' Choice at the WK/SI in 2008.



Expert winners were Kenny Stevens, Bob Whitely and Matt Neumann.



Old Time Stunt winners were Roy Trantham, Bob Whitely and Chuck Feldman.



Larry Fruits, Chuck Feldman and Steve Moore topped out in Intermediate at the WK/SI.



Advanced winners were Jason Pearson, Louis Rankin and Roy Trantham.



Classic Stunt top dogs were Jim Lynch, Bob Whitely and Kenny Stevens.

Visit the PAMPA Web site at www.control-line.org to download the 2009 Control Line Precision Aerobatics' Nats schedule.

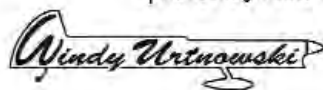


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District VII

By Crist Rigotti

Iowa, Michigan, Minnesota,
Wisconsin

Happy New Year! I hope all of you had a good holiday season. We should be deep into the building season by now. That leads into a plea for some pictures and details of your latest project.

I'm writing this the week before Thanksgiving and I'm already into building two airplanes. I'm building an electric Jamison Special after experimenting with my OTS Barnstormer this past flying season. The other project is a slightly smaller version of last year's Harbinger. This one is about 550 squares and will be powered by an O.S. .46LA. The wing, flaps, stab, and elevators are finished. I mean they are covered with MonoKote, trim colors applied, and "ink" lines applied. They all have been hinged and are ready to be glued into place on the soon to be built fuselage.

I'm thinking of building a slightly larger profile version and power it with an electric motor. I have to finish the Harbinger 40 first. I'm looking to have it wrapped up by the New Year.

All of the pictures in this column are from the Sig contest that was held in June 2008. If I remember right, the weather was very good. A big thanks goes out to Sig Manufacturing for hosting and sponsoring the 26th Annual edition of this contest. *SN*



Mike Pratt and Scott Christensen judge OTS. This was my first event in which I flew an electric airplane. I flew my Barnstormer.



John Paris flies his Viking in OTS.



Tony Karas and Larry Lindburg take a break during the contest.



Jeff Welliver poses with his RSM Tempest.



Roger Wildman flew his beautiful Davis Special.



Allen Goff holds his Petra 6.



Michael Paris showing us how it's done!



Keith Sandberg and his very nice-looking P-40.



Mike Pratt and his Force.



Russ Gifford and his Primary Force Squaball.



James Gifford is ready to fly his Extra just before his first full pattern at a contest. Way to go!



Michael Paris takes second place in Beginner.



John Christensen takes a third place in Intermediate.



Keith Sandberg holds a second-place plaque for OTS.



Grace Paris takes first place in Beginner.



I am humbled by being given the Sig Sportsmanship Award.

Arkansas, Louisiana, New Mexico, Oklahoma, Texas

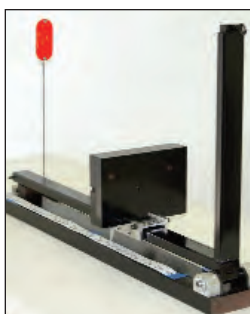
Guest reporter—Dale Gleason. Here is a brief run-down of goings on in District 8. (Well, brief by Fancher standards anyway!)



The Tulsa GlueDobbers clubhouse in July.

The Tulsa GlueDobbers, one of the most active CL clubs in this great nation of ours, have found great use of their new clubhouse. It is cooled for those hot summer days and heated so they can

warm up after cold winter attempts to get a four-stroke motor to start. Tulsa's new facility is completed, and they've already had a dandy contest there. They stay busy not only flying, but also innovating—witness the new pull-test machine they have brainstormed! With new AMA rules pertaining to weighing CL planes, Bob Reeves' invention is a timely winner. The GlueDobbers have pioneered in-flight/on-board video of the Stunt



Tulsa GlueDobber's pulltester—form follows function.

District VIII

By John Hill

pattern from the airplane's view, and they've built a "Field Cam" for real-time viewing of their flying circles. They are a great group of innovative guys and gals!

The Dallas Model Aircraft Association, also one of the nation's most active clubs, have finished their 2008 flying season with the finals for the District 8 Perpetual Trophy. Hotly contested to the end, Dale Gleason barely edged out Mike Greb to bring home the "Dreaded Coveted Eagle" for the second time. Its purpose is to increase participation and it does just that. Plus, you don't have to win every time; a whole lot of thirds, fourths, fifths and even a sixth can put you in the running.

So retire from that day job, and go for broke—hit the contest trail! If gasoline prices remain low, it's almost feasible to make them all. Just to give an idea of

what's available in District 8, there are contests in Tulsa, Dallas, Houston, Seguin, Albuquerque, Texarkana, El Dorado and Baton Rouge!

The newest addition to District 8's Contest Trail is the "South Arkansas Championships," in El Dorado, Arkansas. It's a brand new meet, CDed by Norm Faith, blessed by Joe Bowman, and sponsored by the El Dorado Radio Control Flyers' club. Yep, you read it right. The RC guys put out 110% effort and may have contracted CL fever in doing so! (Similarly, the Greater Southwest RC Club in Ft. Worth, has a CL circle, constructed largely by Bill and Rachel Wilson, which is in use every weekend.)



Tom Farmer to present the District VIII trophy.

The DMAA Christmas Party was again hosted by the Prez and his wife, Don and

Flora Hutchinson. What a nice get-together! This year's DMAA Humanitarian Award recipients are, appropriately, Don and Flora, well deserved!



The DMAA Christmas party: The Guys above, and The Dolls below!

The last "episode" of the year is the "FrigidIdjit" Fun-Fly to be held at Dallas Hobby Park to usher in the New Year.

Temps may be in the mid 80s, maybe in the teens. Where's that air-conditioned clubhouse, anyway? Check out the pictures, you will recognize the work of Elwyn Aud, David Russum and Linda and Bob Gleason. Have a safe, happy, fun-filled 2009.



Wonderful people, wonderful scenery in Albuquerque.



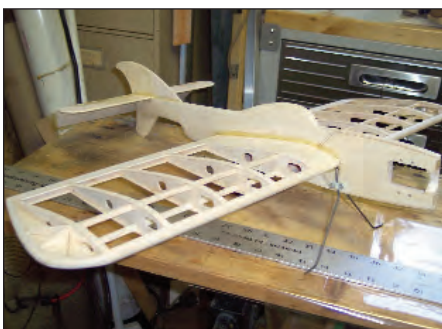
Paul Winter, visitor from the UK.

District 8, over and out. SN

District IX

By Carl Shoup

I received two notes with photos; the first one was from John Holliday who wrote, "Here are photos of where I am at on the Circus Prince for old time Stunt. It is covered with Corehouse's SLC covering right now waiting for primer and paint. It will be Fox powered. Thought I would give you first chance at pictures."



Colorado, Kansas, Nebraska, North Dakota, South Dakota, Wyoming

The second note I received was from Keith McMahan, along with pictures of his Gladiator under construction. The estimated weight will be 45 to 48 ounces. Keith plans on using a Magnum .36 XLS. He is also planning on using a Cyclone prop 11 x 4.5. The wings will be MonoKoted and the fuselage will be painted. It should be flying in May.





The next picture is Devin McDermott—soon to be a new PAMPA member—holding his new Flite Streak that Don Dubie gave him. He did a very nice job of assembly, and on his third flight he was flying inverted, inside and outside loops, wingovers and figure eights. He is planning on making his first contest the Vintage Stunt Championships in Tucson in March.



I finally finished my ARF Flite Streak after only a year of working on it. The extra time paid off pretty well, as on its very first flight went through the pattern with no problems. It has an LA .25, adjustable leadouts, tip weight box,

carbon fiber adjustable push rod, and slotted elevator horn, and it flies about six minutes and 20 seconds on 2.5 ounces of fuel, with 65 foot .015 lines.

The next picture is Don Dubie, Devin McDermott, and me.



Steven Diaz is in the next photo with his newly covered RSM Ringmaster. Steven spent the weekend with me teaching him how to cover his plane, with neon pink MonoKote. He left my house with the plane ready to trim metallic plum. My wife cut out all the letters for Steven on her new Cricut machine. (The Cricut machine is available in craft stores and is used in scrapbooking.) This made the cutting of the letters and numbers much easier and better than can be done freehand.



New Year's day I finally got to do something that I have been wanting to do since I was 13 years old. I had always wanted to fly a CL airplane with skis off of snow. When I was young either the snow was too wet, or I couldn't start the engine, or there wasn't enough snow. After a couple of no snow years I gave up on the idea of flying with skis.

Every year the Montrose Model Aircraft Association has a Chili fly on January 1. This year there was 6-8 inches of snow to fly off of, so I bought a set of Du-Bro Park Flier skis and put them on my ARF Flite Streak. Don also had skis on his Flite Streak. It was 17°, we had to use a propane torch to warm the engines up enough to get them started; everything worked fine after that. I thought it was fun doing the pattern with an airplane with skis on it. Don also had

fun until he did a touch and stop. Fortunately there was minimal damage to the airplane (a broken propeller) but it left really neat tracks in the snow.



As always send in your photos and notes and I will be glad to include them in the column. There must be something going on out there in my District and I would be glad to hear from you. SN

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District X

By Dave Fitzgerald

Arizona, California, Guam,
Hawaii, Nevada, Utah

Well, I actually have a lot to write about this column. Golden State is finished and the report will be published in the next issue of *SN*. It was a very long day for the judges. We used just about every minute of daylight. However, once again, Rachael volunteered to share trophy girl duties with Cassidy Delaney. A contest highlight to be sure. Especially since that guy, Brett ... somebody, won Expert.

Moving on, I had the opportunity of a lifetime. Kathy and I were invited to Brazil by Mr. Thomas Case. While I was in France for the World Champs, Thomas invited us to spend a week in Brazil. Kathy and I were there along with Howard Rush and Marilou, Windy and Karen Urtnowski.

We arrived Friday morning, went to the hotel, and were later treated to a tour of the city. São Paulo is, depending on what statistic you use, the world's second largest metropolitan area. There was no way we could see the entire area; we barely scratched the surface. After the tour, we assembled at their flying circle in preparation for a contest, held on the occasion of our visit. Thomas was gracious enough to loan us planes to fly. Howard, being the serious competitor, opted out of the tour, so he got first choice of the loaner planes. Howard chose the Yatsenko Shark—Retro Discovery .60. I chose Han Zing Ping's 2004/'06 world champ plane. Thomas had purchased it from Han following the 2006 Spanish World Champs. Windy chose one of Bene Rodriguez's planes, the P-47 he flew at the US Nats in 2007. Both mine and Windy's had 4-cycle engines.

The Shark Howard was flying was excellent, mostly in trim, and with an engine that was very reliable and consistent. Howard chose well. Since Windy and I were late to the party, we had the leftovers.

Ping's plane, was, shall we say, oh, ok. (It was a disaster!) I have a new found respect for Ping as a pilot. If he flew well enough to place with this plane, he is quite a pilot. Trim? What's trim? I flew it exactly as Ping had last flown it; very fast, very twitchy controls and an extreme aft CG. It was very easy to severely over control corners, and there was absolutely no tracking whatsoever. Level flight? This plane hunted worse than all of my Star Gazers

put together. Rounds? Oh boy. Now I know why the Chinese maneuvers are shaped how they are; rounds simply cannot be flown round.

I moved the leadouts a bunch as it flew nose in. I added a lot of nose weight, narrowed the handle spacing to almost nil, and then I could almost fly a corner without drastic over control and stall. However, this is when I discovered that it turned much better outside than inside. I've flown a few planes that turned better inside, but this was a first for me. This is not a happy plane; something in the controls is majorly screwed up. This was before I found the wings weren't level and there was too much tip weight. The engine: I have not played around much with 4-cycles, but know enough to get by. This Saito was not in harmony with the world. Unless you got the needle setting exactly right, it was severely lacking in power. With the engine set over-lean, the model would sag significantly everywhere in the pattern, with almost not enough power to complete the overheads. If the needle was right, it was ok, but not great.

One of the only things the plane did do well was fly in the wind. It completely surprised me; I had one flight in the wind and it was one of my better flights. Oh, if the needle was off the slightest bit, it would run either 5:10, or 7:30 (FAI rules), neither of which is optimal. Before Howard and Windy jump all over me ... let me explain this next bit.

I had an accident at the 2002 World Champs in Germany. It seems someone put a fence post right where I thought my wingtip should be in flight, anyway, you know, the plane didn't win that exercise. The Brazilian flying site has two beautifully paved circles, with grand stands, a fully stocked snack bar, train club, electric car club, and boat pond. Their community supports the modelers and helps run the facility. But there are some trees parked on the edge of one of the circles—exactly downwind—hanging over the edge of the pavement. On my fist official flight, I managed to trim a little branch off one of the trees, with the outboard wingtip. Another guy hit a tree and wrecked his plane so I was being careful of that one—given my history—so I hit a different tree. I just brushed the wingtip with, thankfully, no damage. Even as poorly as Ping's plane performed, it still is a significant model

in CLPA history. After all, how many high-end Stunt planes make it out of China? I would have hated to crash a borrowed plane, let alone a plane with a significant history.

Windy's P-47 also needed quite a bit of work. It was tail heavy, it hunted, it was twitchy, and it was difficult to fly well. We did some major re-trimming and it almost settled down enough to be flyable. The really significant thing we did to this plane was a trick I had done on one of my earlier Star Gazers to get it to stop hunting. Howard also remembered some Stuka Stunt threads on research Igor Burger had done last year dealing with trip wires on the leading edge of the stab. Sure enough, about 80% of the hunting was gone after installing wires, top and bottom, span-wise along the leading edge of the stab, about $\frac{3}{8}$ inch back. Also required were leadout adjustments, the addition of a lot of nose weight, handle adjustments, etc.

Bene Rodriguez was the jack of all trades. He ran the contest, flew, and kept track of, and fueled and started our borrowed planes. I am not used to not running my own show, same with Windy, and Howard. It's an odd feeling, after all these years, relying on someone else to get you up and going. Bene kept track of six different planes, engines, fuel loads, starting and the contest. Bene also took care of Thomas Case, and Thomas Case Jr. Thomas Case Jr. was the Brazilian Jr. this last summer in France.

Anyway, the contest went pretty well aside from a few rain showers we had to wait out. We crowned Howard as the new Brazilian National Champ, Bene second, me third, and Windy fourth. After the contest was over, Howard and I participated in the "Day of the Ringmaster" and flew borrowed Ringmasters for the occasion. Windy, Howard, and I were helping trim planes, critiquing flights, engine runs, and props whenever we could help.

That night we ate ourselves silly. That was a foreshadowing of things to come. One of my observations about Brazil, come hungry. We ate more food that last week than I would normally eat in two weeks at home. The awards banquet was at a restaurant that specialized in what is known as a Brazilian Barbeque. The waiters bring large skewers to the table, with meat, more meat, and then even more meat. Windy was in heaven,

Howard just kept giggling every time they brought him more meat along with these small round doughy balls with cheese inside. All was well with the world.

The next couple of days we spent with Thomas. He invited us all to stay with him at his house. After a leisurely drive through the countryside, we arrived with overcast and mist. A bit damp and even cool for the Brazilian spring. Thomas was more than the perfect host, granting us every conceivable courtesy. We rode bikes around the neighborhood to see the architecture and style of living. We went shopping—more for the ladies than the guys—we went to a marina to have a wonderful lunch on one of the many bays leading to the ocean, and stopped for hot chocolate afterwards. I do have to say, I think Thomas has his priorities right: Family, friends, modeling. By the way, if Thomas, who is 72, challenges you to a game of chess, it won't last long. I never stood a chance. We all had several games of chess in the evenings by the fire. Thomas stood undefeated.

After all that, you can't come to Brazil and not go to Rio de Janeiro. We flew from São Paulo to Rio on the second day after the contest and visited more fantastic restaurants and consumed more fantastic food. We toured a bit of Rio, but had the same prevailing weather—overcast, rain and drizzle. We tried very hard not to let that affect our enthusiasm. We took the cable car tram up Sugarloaf Mountain—the one in which James Bond fought the character, Jaws, on top of the cable car. We visited the Christ statue on top of the mountain.

For me the last day was the highlight of our trip; we got to go hang gliding off the top of one of the mountains above Rio and landed at the beach by the harbor. My instructor only had around 19,000 flights and over 20 years of experience. He tried very hard not to talk down to me, as my experience was a bit limited compared to his. It was a fabulous end to a fabulous trip.

I am writing this on our flight home to San Francisco. I have again re-learned an important lesson. The modeling community is full of wonderful people and experiences. This trip started as a simple invitation and blossomed into an incredible adventure. I would highly recommend to anyone looking for a vacation, Brazil. You might even get the loan of a plane for a contest while you are there. We will never be able to repay Thomas Case and Bene Rodriguez for their hospitality, and friendship. Thank you from all of us. **SN**



Han Xin Ping's 2004 and 2006 World Champ Plane, in Brazil. My plane of choice.



Amilton Magri, with a plane that might seem familiar.



Windy Urtnowski's plane: Bene Rodriguez's Brazilian P-47.



Thomas Case Sr. with Thomas Case Jr. at the awards.



Howard Rush and his plane of choice, Yatsenko Shark.



Always popular group shot.



Mayara Moniz, daughter of Suzi Moniz, Thomas Case's assistant.



Windy and Karyn Urtnowski at the awards banquet.



Snacks at Thomas Case's apartment. Note Howard's uncontrollable sense of humor.



Cable car ride up Sugarloaf Mountain.



Bene Rodriguez, confidence.



Off goes Windy.



Cold and windy on the top of the mountain.



Windy getting ready for the leap.



Off goes Bene. Yes I did it too, but I had the camera—no proof of my stupidity.

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District XI

By Bruce Hunt

Alaska, Idaho, Montana, Oregon,
Washington

The last contest of the 2008 flying season, Salem's Fall Follies, was held the second weekend in October. For the first time in several years the weather held for both days of flying. No rain and no wind to spoil the fun. And, because the adjacent field was being used as a rental truck parking lot, there was no Combat and or Limited Racing. Very cool mornings with density altitude readings of -120 feet were a challenge for the gas burners. There were a few lean overruns but most of the pilots got things sorted out to put in their best flights.

The Fall Follies is the last contest of the season and as a result it is the last Classic event for the year and the occasion for naming the winner of the NW Vintage Stunt Championship. This year's winner was yours truly, Bruce Hunt. By sheer persistence and in spite of coming in second in every Classic contest, I was able to acquire the most



The pit at Salem's Fall Follies. Finally a Fall Follies without wind or rain. Both days were crisp and sunny.

points for the season.

In the aerobatics competition, the highlight was the close contest between Howard Rush—fresh from his big win in Brazil—and Paul Walker, who was suffering from severe neck pain. Howard had a three-point edge after the first round but Paul put in a great final flight for the victory. Greg Hart won every event he entered: Sportsman Profile Stunt, Sportsman classic Stunt, and Advanced Precision Aerobatics. Pat Johnston won Expert Classic and Expert Profile. Richard Entwistle took Intermediate Precision Aerobatics in a growing and competitive field of fliers. We may see a swelling of the Advanced class next year after a couple fliers, John Thompson and Mike Haverly, have moved up to Expert.

In all, the Fall Follies was a great success and we look forward to having more of the same next year.

As always you can get an excellent

report on everything going on in the Northwest by checking out the news on the website: <http://flyinglines.org/>. SN



The top places in Expert Precision Aerobatics went to Paul Walker and his electric Impact (foreground), Howard Rush with his New Impact, and Pat Johnston with his well-trimmed P-51 design (background).



Dane Covey, back in Stunt, prepares to fly his Profile Stunt entry, Art Zehner assisting.



Bruce Hunt demonstrates how CL models function to an interested spectator. Later he helped the young man fly a 1/2A trainer.

Another Dane Covey model, an ARC Pathfinder. The ARC and ARF models are providing an early entry for those interested in re-entering competitive Stunt.



with electric power was a hot topic.

Mark Scarborough's electric profile didn't fly but made a debut as more interest in experimenting



Another interesting model was brought out by Pat Johnston. This Gee Bee has almost as much side area as wing area. A great

model for those of us with declining eye sight.



Bruce Hunt signals for a flight in Classic Stunt. Dan Rutherford is thinking how he could downsize the Lark for a .20FP. Hunt won the 2008 NW Vintage Stunt Championship Trophy for the most cumulative points in NW Classic and Old Time competition.

John Thompson's Vector scored well in Expert where John has become the latest bottom feeder in a very competitive Class.



Paul Walker launches Howard Rush's Impact.



Well trimmed, as usual, Howard Rush's Impact scored well, but in the end not enough to out point Walker.

Paul Walker's Electric Impact flies again. After losing his electric world championship model and being forced to use his gas-powered model in France, Paul was happy to be flying last year's electric model.



Fresh back from his victorious Brazilian expedition and his 6th place finish among the Nats top 5, Howard meditates on what checkerboards to use on his next model.



Even with pains in his neck Walker flies another almost perfect pattern to take first in Expert.



Mike Hazel guards the trophies at the Fall Follies. Mike is a mainstay for CL modeling in the NW and served as chief griller at Sunday's Hamburger Hot Dog feed.

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Specifications

Model Name: Starfire/SV-30

Designer: Randy Smith/Aero Products

Construction type: Aero Products Kit, foam wing and stab, remainder typical kit

Wingspan: 60.75 inches

Length: 45 inches

Moment arms (measured from the front of the wing to the back of the spinner and from hinge line to hinge line)

Nose: 10.5 inches

Tail: 17.25 inches

Weight dry: 67 ounces

Power package: PA .61 on Quiet Pipe 6-ounce Brodak Magnum tank

Propeller: Bolly 3-blade 12.5 x 4.3

Finish: KlassKote epoxy paint

Line length: 64 feet eyelet to eyelet

The Aero Products Starfire SV-30 is in the Dreadnaught/Tempest family of elliptical-wing planes, minus the turtle deck and a few other cosmetic tweaks. This was my first build with a pipe tunnel, and I was a little nervous about the whole thing, but in the end it turned out my worries were unwarranted. A few shorter formers in the rear, and a pipe floor and away you go.

The finish was done with Silkspan and KlassKote Epoxy paints. The finish weighed 6.5 ounces, and I had budgeted for 6 to 10, so I was happy. The overall weight is 67 ounces. Not a feather weight, but in fighting range for a plane this large. I have seen this family of planes fly very well even up into the mid-70-ounce range. Judging from how well mine flies, I'm not sure I'd really want to build one any lighter.

Bench trimming to Randy Smith's specifications proved invaluable for first flights. I did use Tom Morris controls with true 90-degree horns, large ball links, and a reverse thread adjustable push rod which allowed me to dial a little elevator droop. The CG came close enough to plans as not to worry. The rudder is zero offset, but I did airfoil it.

Tip weight is at $\frac{5}{8}$ ounce; just enough to drop the outboard tip. The leadout's center is set at $\frac{5}{8}$ inch behind the CG. The engine was set at



1 degree of offset—just enough to be sure there was no inset.

The Starfire could have patterned on the first flight, except I was being cautious and needed a handle tweak. Other than that, I didn't touch a thing. I did a full pattern on the second flight. I flew it a little cautiously, a little big and soft, but there was no need. It's got a nice sharp corner, a flat bottom pullout and good line tension everywhere. As for the tuned pipe setup, set it and forget it. Randy's recommended pipe length works great if you also use the recommended prop, fuel, etc. in a reasonable size/weight plane. Duplicating his run is simple and effective.

In this case, I'm using his new Quiet Pipe series; set it at the recommended 18-inch length and haven't touched it. Once you set your prop tweaks for the speed you want, the only adjustments you need to make to the run are done through nitro content (5%, 7.5%, or 10%) for ambient conditions.

It feels like it was a long ride these past 9 months from cracking open the kit to the first flights, but it was worth it! *SN*



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Upcoming Contests

Cobb County Skyrebels ATLANTA STUNT MEET 2009

AMA Sanction # Pending
May 16 and 17, 2009

Lockheed-Martin Parking Lot
Marietta, Georgia

Saturday, May 16 12 Noon

Basic Flight
Nostalgia Stunt - 1984 Cutoff (JSO)
PAMPA Old Time (JSO)
Profile Stunt (JSO)

Sunday, May 17 9:00 a.m.

Beginner (JSO)
Intermediate (JSO)
Advanced (JSO)
Expert (JSO)

Entry Fee * 1st Event \$15.00
* 2nd Event \$10.00
* 3rd Event \$ 5.00
(Juniors/Seniors - 1/2 Price)

Special Note: There will be no builder of the model rule and no appearance points awarded at this contest. Site has FIVE paved circles. Open for practice all day Friday, May 15th. No concessions on field; restaurants close by. Permanent restrooms on field. Contest Director: Tom Dixon, 770 592-3279

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O.S. .35-S Rework includes: 1. Deburr the factory port burrs, with a rubber tip Dremel tool, 2. Then I send the piston out to be heat-treated, (which also expands it slightly), 3. Then I hand-lap the piston to the cylinder using a very mild lapping compound, 4. I install a custom made stunt venturi, 5. I install Allen Screws. These motors will 1-flip start, every time! If you supply a NEW motor the cost is \$75 (I CANNOT rework a used .35-S) If I supply the motor = \$125

McCoy .40 Red Head Rework includes: The weak link in the Mc.40s was the soft, "sintered" iron piston, which lost compression quickly, and would not allow use of a muffler. 1. I send the piston out for heat-treating (which also expands it slightly), 2. Then I hand-lap the piston to the cylinder using a very mild lapping compound, 3. I install a custom made stunt venturi, 4. I repaint the red head, 5. I install allen screws. These McLayed .40s have the strongest 2-4 break of any motor I have ever flown. If you supply a NEW motor the cost is \$70. If I supply the motor = \$115

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2009 CL Stunt Nats Schedule

Sunday, July 5

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Beginner & Intermediate Stunt Registration*	Grass Circles
8:30 a.m.	Beginner & Intermediate Stunt Pilots' Meeting*	Grass Circles
9:00 a.m.	Beginner & Intermediate Stunt Event*	Grass Circles
12:00 noon	Old Time and Classic Stunt Registration*	Grass Circles
12:00 noon	Jr./Sr./Open/Advanced entries close	Nats Headquarters
2:30 p.m.	Open/Advanced Models Presented for Appearance Judging	180 Building
3:00 p.m.	Pilots' meeting/Forum	180 Building
4:30 p.m.	Concours Voting	180 Building
6:30 p.m.	Judges' Seminar Review	TBD

Monday, July 6

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Old Time & Classic Stunt Events Pilots' Meeting*	Grass Circles
8:30 a.m.	Old Time & Classic Stunt Events*	Grass Circles
9:00 a.m.	Judges' Seminar Phase II (Flight, may move earlier)	L-Pad Circle 4
6:00 p.m.	Judges' Seminar Review	TBD

Tuesday, July 7

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Open/Advanced Qualifications Rounds 1 & 2	L-Pad

Wednesday, July 8

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Open/Advanced Qualifications Rounds 3 & 4	L-Pad

Thursday, July 9

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circles
8:00 a.m.	Open Top 20	L-Pad
8:00 a.m.	Advanced Finals	L-Pad

Friday, July 10

6:30 a.m.	Control Line Precision Aerobatics Practice	L-Pad, Grass Circle
7:30 a.m.	Jr./Sr. processing and Appearance Judging	L-Pad
8:00 a.m.	Jr./Sr. Finals	L-Pad
8:00 a.m.	Open Finals	L-Pad Circle of choice
12:00 noon	Walker Cup Fly-off	L-Pad Circle of choice
6:00 p.m.	PAMPA Reception	Horizon Convention Center
7:00 p.m.	PAMPA Banquet	Horizon Convention Center

* Unofficial Event

If you are flying only unofficial events, you must register with Nats Headquarters as a mechanic.

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REGISTRATION AND PAYMENT: VSC-XXI (21) March 17 – 21, 2009 (Five Days)

Please complete ALL sections including AMA #, EMail Address, Banquet Choice, and Signature (required)

NAME: _____ AMA # _____

STREET: _____ CITY: _____ STATE: _____ Zip _____

EMAIL ADDRESS: _____ License Plate # and State: _____

Needed if you would like entry conformation

(Only if staying in park overnight)

FOR ANY AND ALL EVENTS: I hereby certify that I have read all information accompanying the entry form, and that the model(s) entered by me will be built by me (if required) and flown in compliance with the current Competition Regulations (both AMA and PAMPA), and will previously have been successfully flight tested and proved to be airworthy in accordance with the Official AMA Safety Code.

Signature: _____

EVENTS ENTERED:

OTS @ \$15.00 _____ (Tues. 17th – Wed. 18th)

IGN @ \$15.00 _____ (Tues. 17th – Wed. 18th)

CLS @ \$15.00 _____ (Thru. 19th – Sat. 21st)

ARF's. ARC's. Purchased, or Borrowed models are allowed in all event, but, models entered in Classic receive a zero (0) for appearance points. For details refer to the Cholla Chopper web site; www.ccmasonline.org (See Item #1)

BANQUET (Top Sirloin) _____ @ \$28.00 _____ (Sat Night the 21st)

DESSERT CHOICE: 1) Chocolate Torte _____ or 2) Cheese Cake _____

BANQUET (Sauteed Chicken) _____ @ \$28.00 _____ (Sat Night the 21st)

DESSERT CHOICE: 1) Chocolate Torte _____ or 2) Cheese Cake _____

BANQUET (Vegetarian Lasagna) _____ @ \$28.00 _____ (Sat Night the 21st)

DESSERT CHOICE: 1) Chocolate Torte _____ or 2) Cheese Cake _____

BANQUET (Salmon Filet) _____ @ \$28.00 _____ (Sat Night the 21st)

DESSERT CHOICE: 1) Chocolate Torte _____ or 2) Cheese Cake _____

Entry Must be Received Not Later Than Wednesday March 6, 2009

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(Cholla Chopper Web Site: www.ccmasonline.org)

1) All contestants entering VSC are required to sign the entry form where indicated. A builder of the model rule, as it applies to VSC, is included in the current Competition Regulations for VSC and is posted on the Cholla Chopper Web Site. Please read it if you have not already done so. Pull Test for Old Time and Classic Stunt will be per the Displacement Chart in the 2007 – 2008 rules for Control Line Precision Aerobatics. Scoring for Classic will be per the 2007 – 2008 rules for Control Line Precision Aerobatics. This means pattern points will be included in the scoring.

2) During the two official flight days for Old Time and Old Time Ignition (March 17 & 18), the two unused grass circles will be reserved for Old Time and Old Time Ignition practicing until 11:30AM. No Classic practice flights will be permitted on these two circles (at the contest site) before 11:30AM the two days of Old Time competition (Tuesday & Wednesday) unless the ignition stunt competition ends early. If ignition stunt ends early, that grass circle is open for practice to any and all competitors. The asphalt circle not used for Old Time competition (the new one) is reserved for Classic practice both days of Old Time Competition until 11:30AM. After 11:30AM all the unused circles are open for practice to any and all competitors. The rules for Old Time Stunt are unchanged.

3) There will be three days of Classic competition at VSC 21; one round each day using all three asphalt circles. The two highest scores will be added together for the final score and placing. Classic Stunt official flights will start no later than 7:15AM each day (Thursday - Saturday; March 19 & 21) with the pilots meeting taking place at 6:45AM each day. Because of the early start the Classic flight order will be posted at the Riverpark Inn during appearance judging Wednesday March 18th.

4) The Dinner and Awards Banquet will take place Saturday night March 21st at the Riverpark Inn located at 350 S. Freeway (I-10 at 22nd Street). Cash Bar at 5:00PM; Dinner is scheduled for 6:30PM.

5) The Cholla Chopper web site is: www.ccmasonline.org. Additional important information is posted there and can be printed, downloaded, or both. You should visit the web site and carefully read all the information provided. Please line to the site and download a full copy of the VSC 21 Flyer. Call Robin Sizemore (520-749-4434), Lou Wolgast (520-749-1812), or Jim Hoffman (480-897-0630) if you do not have internet access.

6) If you plan to stay in Christopher Columbus Park over night, fill in the State and License Plate number of your RV, Camper, etc.; the State if different from the address. We need to know this information so that we can provide it to Tucson Parks and Rec. which will keep the authorities from knocking on your camper door at 11PM.

The Appearance Point

By Joe Adamusko



As a follow up to the Stuntress that I designed and built in 1995, I wanted to incorporate some refinements into a new airframe that would still give it the beautiful curvaceous look of the elliptical wing and tail, but also make it appear more aggressive and powerful.

The first design refinement I made was to the fuselage profile. I increased the overall height of the nose and incorporated a

greater descending curve to the nose ring, while still maintaining the top block canopy area section and high back aft fuselage. The depth of the nose section was increased to enclose a rear exhaust header muffler along with more upward bottom block trailing taper to the fuselage tail post. And finally, I wanted to increase the side area of the fin and rudder to provide ample space to paint on a silhouette logo.

The Dreampiece elliptical wing has an improved airfoil transition from the trailing edge to the wing tips, using redesigned tip sweeps and tip rib airfoil profiles. The new wing features molded $\frac{3}{32}$ balsa leading edge sheeting, a 14.5 inch spread removable wing mounted landing gear legs, an adjustable lead-out guide, and a tip weight box designed to accommodate bolt in type lead tip weights.

The fuselage built up incredibly light in weight due to the use of a two part split shell top and one piece bottom blocks molded from $\frac{1}{8}$ A-grain sheet balsa. Other features are access hatch cover openings on the fuselage side for adjusting the elevator control horn gearing and push rod length, and an adjustable wiggly rudder linkage. The traditional dope finishing procedure applied to the model is light in weight, repairable, and expected to last for at least 15 years. **SN**

Dreampiece Specifications

Model name: Dreampiece

Designer: Joe Adamusko

Construction: Built-up balsa wood construction throughout; wing with molded LE sheeting panels, $\frac{1}{2}$ -inch-thick, flat-sheeted, geodetic truss-type stab, sheeted fin, shaped sheet balsa flaps, elevators, and rudder. Fuselage is $\frac{1}{8}$ -sheet sides with $\frac{1}{16}$ -ply doublers, $\frac{1}{4} \times \frac{5}{8}$ rock-hard maple engine mount beams, and molded $\frac{1}{8}$ -inch sheet top and bottom blocks. Main landing gear and tail wheel gear are a torsion box gear-leg type and are removable.

Wingspan: 61 inches.

Wing area: 694 square inches.

Length: 49 inches from tip of 2-inch spinner cone to widest point of rudder trailing edge.

Moment arms: (measured from the front of the wing to the back of the spinner and from hinge line to hinge line; nose 10.5 inches, tail 18.5 inches.

Weight dry: 58 ounces with power package, tank, and 1.5-ounce tip weight.

Power package: RoJett BSRE .61with header muffler and a custom-built, 6.25-ounce uniflow tank with baffle.

Propeller: Brian Eather 13 x 4.75 2b carbon fiber (shown) or Rev-Up 13.5 x 4.5 2b painted wood.

Finish: Brodak butyrate construction dope and medium silkspan substrate. Brodak dope, DuPont and PPG acrylic lacquer color paints. Brodak butyrate Crystal Clear top coat, hand-sanded and polished.

Line length: 63 feet center to center.

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DREAMPIECE





Thomas Case Jr. being carried by exuberant, fun-loving Brazilians to celebrate the victory of his first flight at the Brodak event.